Peer Support for Mothers with Postnatal Depression

A Pilot Study

Health and Life Sciences
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A Doctoral Study submitted to
De Montfort University
In partial fulfillment of the requirements
for the Doctorate in Health Sciences

FIONA PHIPPS
JUNE 2014

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ACKNOWLEDGEMENTS

I would like to pay tribute to the following people for their guidance and support at various stages throughout this study. The order does not represent the importance of input given but is (roughly) chronological.

Firstly, I would like to express my thanks to Dr Sue Dyson for her faith in my ability to study at PhD level and who, as my initial supervisor, provided me with invaluable support, guidance, encouragement, positivity and constructive feedback over a number of years.

Thank you to my team of Peer Support Workers for their agreement to take part in my study and for all of their consistent dedication, time, and compassion – without which this research would not be feasible or achievable.

Thank you to the mothers in both the control and intervention group who consented to partake in the study and painstakingly completed all of the required paperwork - without complaining!

Thank you to my amazing father, Professor Michael Stephens, Dean of the Faculty of Education at Nottingham University, who provided me with the drive, ambition and self-belief to recognise that I could actually achieve such an acclaimed goal.

Thank you to my inspiring and patient Uncle, Mr Brian Heap, who, sadly died part way through my programme but whom, without his unwavering time and commitment I would not have had the stamina or self-confidence to complete my study. His knowledge of statistics was a huge asset!

Thank you to Dr Peter Norrie and Dr Rosemary Garratt who as my final first and second supervisors provided me with hours of guidance, feedback and immense support. The hours that they both committed to helping me to achieve this must be numerous.

Finally, thank you to my best friend and sister, Dr Caroline McNaughton, who has supported me consistently through a very, very difficult and challenging time in my life and without whom I would not have had the strength, at times, to carry on.

ABSTRACT

Background

Postnatal depression (PND) is a global problem and an important public health issue. It is estimated that approximately 15% of women experience depression during the first postnatal year but there are problems in recognition because its clinical assessment can be complex. The incidence of postnatal depression continues to rise resulting in serious consequences for the mother, her child and the extended family and a risk of suicide (the leading cause of maternal death in England and Wales) and infanticide in some severely depressed mothers.

Treatment programmes vary considerably but many studies are suggesting that psychological interventions can be as equally, if not more, clinically effective in the management of depression as routine care from a general practitioner or anti-depressants in the short term – and may be more cost effective.

Method

The aim of this exploratory pilot study is to identify whether the support, on a one to one basis, from a Peer Support Worker (PSW) would assist in the reduction of PND in new mothers. Eight PSW's were recruited. Each PSW had previously suffered from mild to moderate postnatal depression but had recovered and were not currently receiving any form of psychological support or taking any medication. They were employed, on a six month contract, by the local NHS trust. References and enhanced criminal records clearance were obtained. A confidentiality statement was also signed by the PSW.

Thirty mothers were recruited by their own Health Visitor. This was carried out using the Edinburgh Postnatal Depression Scoring documentation (EPDS) alongside a clinical assessment. The cut off score, as agreed by both the lead researcher and the Health Visitors involved in the study, was 11. Fully informed

consent was obtained and participant information sheets given. The mothers were allocated into either a Control group or an Intervention group using number alternating.

The PSW's received formal training about child protection procedures/safeguarding children in addition to the relevance and importance of confidentiality. However, apart from this, a structured training programme was not adhered to. The PSW's strongly felt, as a combined group, that they wanted to provide the intervention simply as a 'fellow mum who had survived the rollercoaster journey of PND'. Each PSW wanted to identify the nature of the problem, find a possible solution, and design their own proposed 'support package' – from the outset of the study.

The PSW visited the mother in their home environment, or a location of their choice, for a period of six weeks on a once weekly basis (intervention group). This was then compared to a number of mothers who received support from their family Health Visitor (HV) alone (control group). Data collected was both qualitative and quantitative. The PSW's and the mothers from both the control group and the intervention group were asked to maintain a log book reflecting upon their feelings and thoughts after each visit (either from their PSW or their HV). Individual and group supervisory sessions were also offered by the lead researcher to both the mothers within the intervention group, and the control group, in addition to the PSW's. A number of the participants were interviewed on a one to one basis when their infant was six months old. Data from the interviews was subsequently transcribed, coded and catergorised, and key themes identified.

Quantitative data was collated in the form of an Edinburgh Postnatal Depression Score (EPDS) – an assessment tool which is routinely used to identify mothers at risk or suffering from postnatal depression. The EPDS score was recorded prior to the support commencing by either a PSW or the Health Visitor, after completion of all six visits, and when the infant was six months old.

Analysis

The EPDS scores recorded at 6 weeks, 12 weeks, and again when the infant was six months old, were analysed and summarised using graphs and charts. Non parametric analysis using Friedman's Anova and the Wilcoxon paired test was carried out. A Mann Whitney test, Kolmogorov-Smirrov test and a Shapiro-Wilk test were also performed.

A constant comparative method was used as a means of analysing the qualitative data collected from both log books and interview transcript (Denscombe 2008). The lead researcher consistently read and re-read text data, compared new codes and categories as they emerged and repeatedly compared them against existing versions. This process enabled the researcher to refine and improve the explanatory power of the concepts and theories generated from the data. Similarities and differences were highlighted and categories and codes were identified. On completion of this analysis, all participants were contacted to ensure validity of the findings and that each participant agreed with the researchers interpretation of the data collected.

Results

Qualitative and quantitative findings from this study suggest that the input from a PSW does assist in the reduction of PND in new mothers. This is demonstrated in both the analysis of the quantitative data and the qualitative.

The EPDS scores demonstrated little difference between the participants at 6 weeks but the statistics started to diverge at 12 weeks – the mean at 12 weeks for the control group is recorded at 12.46 and the intervention group is 10.33 – a difference of 2.13. The EPDS at six months demonstrates a difference between the two scores as 2.67 (the control group mean recording is 11.60 compared with the intervention mean which is 8.93).

The key themes identified were the immeasurable value of 'social support' and 'shared experiences'. The resounding factor that appears repeatedly throughout the analysis of data is the fact that the mothers could 'truly relate to their Worker.' Their PSW gave them 'hope', made them feel as if they were 'not a failure' and gave them an overwhelming 'sense of normality'. This, in turn, increased their self-esteem, their positivity towards their parenting role, and their ability to therefore be 'a good mother.' A major strength of the work was the involvement of the PSW's in both the planning and the implementing of the intervention. It was their design, their creation, and their feelings about what may really help their mother.

A number of other themes were also identified that were, interestingly, commonalities across the entire data set (participants and PSW's). These included recognition of their own changing perspective – a realisation that there simply is no 'quick fix' solution, that both time and support are required. The PSW's described feelings of 'personal benefit', 'self-awareness' and the 'provision of closure' for themselves. The intervention group also talked, at length, about their 'personal benefit' from the PSW, and their own self-awareness about how they truly felt, their emotions and, in some instances, why they felt this way. The control group recognised the huge advantage from talking to other mothers and, although they did not have the formal support sessions from a PSW, they embraced the opportunity of sharing their thoughts and feelings with 'fellow mums'. Each participant, and PSW, discussed the sharing of experiences, empathy, the feeling of 'release' and, particularly on the mothers' part, the importance of knowing that, actually, they are not 'alone'.

Conclusion

The aim of this study was to provide early intervention to mothers who were classed as 'at risk' of suffering from PND, and, indeed, the support from the PSW's did appear to have a positive impact upon the mothers' mental health and wellbeing. However, this was a small scale, pilot study over a relatively short

period of time. Larger, more longitudinal studies are certainly required. The importance of the pilot study presented here lies in its usefulness in shaping research to investigate and explore further whether there are indeed beneficial factors to post-natally depressed mothers who receive one to one support from a PSW. The positive results from this study can, potentially, have a huge impact within practice and, most importantly, upon the lives of those affected by postnatal depression.

CHAPTER ONE: THE RESEARCH STUDY

1.1 Introduction

My interest in postnatal depression (PND) initially began when I was employed as a Health Visitor in a rural practice in Derbyshire. With a case-load of 350 families I had a higher than average percentage of mothers suffering from PND (ranging from mild to severe). Statistical evidence has shown that postnatal depression affects 12-15% of mothers and may mark the onset of long standing psychiatric disorder (Cox et al 1987). My case-load incorporated 20-25% of mothers formally diagnosed with PND. Other areas of Derbyshire were variable in their reported detection of PND with a lower incidence reported in inner city areas (8-10%). There may, of course, have been many more that remained undiagnosed and never sought appropriate help or guidance. The incidence of postnatal depression continues to rise and, due to a number of maternal suicides from undetected and subsequently untreated PND, the topic is hugely controversial (Morrell et al 2009). Denial and ignorance by health professionals have been two of the barriers in recognising and treating women suffering from perinatal mood disorders. However, as discussed by Kendall-Tackett (2010), progress is being made in both areas, and public denial surrounding this topic is gradually reducing. The amount of scientific research about maternal mental health has increased but, to raise further awareness and, in turn, reduce the high percentage of mothers with undetected and untreated PND, there is a need for more up-to-date information and extensive research based studies. Without accurate information and development mothers become passive victims and professionals may administer incorrect treatment and care (Dennis 2009).

Depression in new mothers is one of the most common complications of childbirth (Dennis 2009). Yet it is still subject to many myths and misperceptions. This misinformation can lead professionals to misdiagnose and mothers to be unaware and unable to recognise the illness. Post-partum depression isolates mothers

when they are at their most vulnerable (Beck et al 2006). New mothers may be ashamed to admit that, actually, life with a new baby is not always the wonderful experience that it is often portrayed to be. Mothers, incorrectly, assume that everyone else has a much smoother transition to motherhood than they are perhaps experiencing themselves. Disclosing to someone that they are feeling low, tearful, exhausted and emotional may be too great a hurdle to contemplate. Sadly, without appropriate support and intervention, post-partum depression can have major long-ranging implications for mother, her partner and their child (Morrell 2009).

1.2 The Research Study

PND is a global problem, a major health issue for many women from a number of diverse cultures. Incidence is high and the treatment programmes available, which will be discussed within the study, vary greatly. Research suggests that although the causes of PND are multifactorial, many studies have consistently highlighted the great importance of psychosocial support (O'Hara et al 1991, Cooper et al 1998, Beck 1995). As observed by Dennis et al (2009), previous studies clearly show a significant increase in the risk of PND in mothers who do not have someone with whom they can talk openly with (Brugha et al 2002, Paykel et al 1999, O'Hara et al 1991). Small et al (1997) concludes that mothers become depressed because of a 'distinct lack of support' and 'social isolation'. Within Smalls' study, when participants were asked what advice they would give to new mothers with PND, the most common suggestion was simply 'find someone to talk to'. Cox et al (1987) found that the Edinburgh Postnatal Depression Scale scores were significantly reduced with maternal perceptions of support from other women with similar age children. Well-controlled research trials have revealed that post-natal depression responds to treatment in the short term (Holden et al 2004, Appleby et al 1997, O'Hara et al 2000), with treatment roughly doubling the spontaneous recovery rate. However, it is unclear whether this short-term effect is maintained and it is also not clear whether different forms of psychological

intervention might have different impacts. There have been a number of studies using a variety of psychological and psychosocial interventions (Abramowitz et al 2003, Arizmendi et al 1984, Cooper et al 1998, Dennis 2005, Stuart et al 1995) and indeed, several of these studies have found that psychotherapeutic interventions for the treatment of PND are highly acceptable. However, despite an exhaustive literature search, there did not appear to have been any studies focusing upon a one to one peer support network for mothers at risk of PND. Dennis et al (2009) studied the effectiveness of telephone based peer support in the prevention of PND but this did not incorporate any face to face meeting.

1.3 The Research Question

Could the provision of support from a fellow mother, who has suffered and recovered from PND, be an intervention with the potential to reduce PND in new mothers?

1.3.1 A Synopsis of the Study

- Inclusion criteria for the study were first time mothers with an elevated EPDS score, greater or equal to 11 at six weeks following birth and a clinical interview also at six weeks. This is performed by the participants' own Health Visitor (HV).
- The 30 mothers recruited were allocated using number alternating into an intervention group and a control group.
- The Peer Support Worker (PSW) provided enhanced support on a weekly basis to the intervention group only for a period of six weeks – this was in addition to their routine weekly support from their own Health Visitor. The control group received the standard six weekly support from their Health Visitor only.
- Each participant received an interview and EPDS assessment on conclusion of all six visits. This was carried out by their Health Visitor.

- Both groups had the EPDS repeated when their infants were six months old. This was in addition to a face to face interview, both carried out by the lead researcher.
- All participants were asked to maintain a simple log book reflection after each visit by both the PSW and/or their own HV. Group and one to one supervisory sessions, with the lead researcher, were also offered on a bi-monthly basis.
- The PSW's were asked to maintain a log book reflection after completion of their weekly support visit. Group and one to one discussions with the lead researcher were also offered on a bi-monthly basis.
- On conclusion, all data (EPDS, log book reflections, notes from the discussions within supervisory sessions, and transcribed interviews) were analysed and conclusions drawn where possible.

1.4 A Definition of Depression

Depression has been described, in the past, as a normal range of response following a stressful event. It should be acknowledged that, when exposed to a stressful life event, a certain percentage of people are going to feel low in mood and may become depressed. This assumption is helpful because it attempts to normalise depression. However, this is very different from saying that it is of no consequence. When depression is finally recognised and acknowledged as a major part of life, individuals may feel more comfortable and be more open when discussing it.

1.5 Defining Postnatal Depression (PND)

Depression accounts for the greatest burden among all mental health problems and by 2020 is expected to become the second most common general health problem (Murray 1996). Postnatal depression is an important category of depression and a highly prevalent illness. Women with postnatal depression are

likely to experience persistent feelings of inadequacy, anxiety and hopelessness, as well as an increased likelihood to terminate breastfeeding early (Cooper et al 1998). They experience more difficulty with infant sleeping routines, infant crying and demands for attention – particularly when depression occurs in the first year of the infant's life.

In an effort to standardise the terminology, the Diagnostic and Statistical Manual of Mental Disorders (4th edition), restricted the specifier of post-partum onset to depressive episodes occurring within four weeks of delivery. However, most studies of postnatal depression have continued to use much greater time frames, in part because epidemiological studies show that women's heightened vulnerability to depression continues for at least the first six months after delivery (O'Hara et al 1991).

This will be discussed at a later point in greater detail within the literature review. Postnatal depression must be distinguished from the 'baby blues', a common experience following delivery, in which new mothers experience low mood and tearfulness. This mild and self-limiting condition invariably disappears approximately two weeks after delivery – unlike postnatal depression which can linger, particularly if left untreated or undiagnosed, for many, many years.

Health professionals need to be aware that PND can manifest itself in a wide variety of symptoms. These may include periods of sadness, excessive emotional sensitivity, pessimistic thinking, irritability, apathy and social withdrawal. Depression can also present itself with somatic complaints as the predominant symptom, including pain, fatigue, sleep and appetite disturbances. At the present time, there is no specific diagnostic category for post-natal illness. However, as explained by Kendall–Tackett (2010), the specifier ''with post-natal'' onset can be added to the following conditions: major depressive disorder, manic or mixed

episode in major depressive disorder; bipolar 1 or bipolar 2 disorder, or brief psychotic disorder if these conditions occur in the first six weeks after birth.

The concept of postnatal depression has the danger of insinuating that there is a homogenous disorder, which may be investigated and treated as if it had a single causal factor. Almost all mothers with anxiety, obsession or post-traumatic disorders, or with a disturbed infant relationship, may be depressed, but the setting, causes and the treatments are different (Aiken 2000). However, it does have value as a lay term - it has legitimised maternal depression in the minds of the general public, providing a valid explanation for a mother's distress and subsequent 'role' failure, even in extreme instances explaining inexplicable behaviour such as child neglect and infanticide. It has, in some aspects, diminished the stigma surrounding the illness and enabled more mothers to acknowledge that they are unwell and do need to seek intervention. It has aroused recognition and concern about a major global problem (Morrell et al 2009).

There are a number of factors that increase women's risk of depression. A lack of social support is of paramount importance but other factors include a woman's attributional style; her expectations about what it will be like to be a mother, her self-esteem, how competent she feels as a parent, and prior vulnerability factors such as the experience of loss, previous mental health issues and a dysfunctional or abusive family history (Morrell 2009). The social factors related to depression include the amount of help that the mother has received with her baby and other children, the amount of emotional support that she receives from her partner, her socioeconomic status, and her exposure to stressful life events.

However, of the social factors considered, far and away the most influential appears to be a woman's level of social support (Stuart and O'Hara 1995, Morrell 2000, Honey et al 2003). As the research on any form of low mood has repeatedly demonstrated, lack of social support is strongly related to depression. Social

support from family and friends increases self-esteem and self-efficacy. As suggested by Yatham et al (2009), any effort to prevent post-natal depression must include a strong component of social support.

The social support literature includes general support, family support, partner support and the impact of the social network. As discussed by Tammentie (2004), family support has changed dramatically over the last fifty years. In previous eras the new mother had a full supportive network living within close proximity. Although by no means the case for all new mothers, certainly a familiar pattern in post-war Britain was that maternal grandmother may be next door, siblings in the next street and an aunt or two in the adjacent town. Familial support was plentiful, advice and babysitting always on hand. If the mother was having a stressful day and everything was becoming too much Grandma or Aunt would step in and take control. Today, due to many young women moving away from close family proximity because of, perhaps attending University, work commitments, career aspirations, costs of housing, family dynamics, the previous close knit community has now gradually dissipated (Sword et al 2008). Grandparents may live hundreds of miles away and a recent transfer-in to an area may mean that the new mother has little or indeed no social support or contact. In cultures where there is a low incidence of postnatal depression, there is a huge proportion of personal attention given to the mother. This has been described as ‘mothering the mother’ – so called as invariably the care is given by the woman’s own mother (Tammentie 2004).

This is a far cry from what mothers within the western world receive. After a baby is born any attention received by the mother is normally transferred immediately to the new baby. In general there is very little acknowledgement of what these mothers had experienced-both physically and emotionally (Sword et al 2008).

Oakley (1981) strongly believes that our failings in delivering emotional support post-partum are attributed to the fact that we have 'medicalised' both pregnancy and giving birth excessively. She states that women are treated impersonally at the hands of efficiency-minded professional practitioners. Women are frustrated in their attempts to find their way through a health care bureaucracy that has become so specialised that it mystifies even the average consumer – and so fragmented as to render many services either incomplete or redundant. Oakley criticises the system of maternity care offered in the modern world. She believes that we are so in awe of the technology and sophisticated interventions that we, as practitioners, lose sight of the immeasurable role that family members and close friends can play.

Indeed, in cultures whereby post-natal depression is virtually non-existent, perhaps medical technology is less advanced, but such societies are certainly achieving much more than the Western culture can, in our current climate, ever hope to aspire to. As discussed by Beck (2005), we almost need to rewind and re-review our complete attitude towards our maternity services, and in the hope of ever reducing our climbing rates of post-natal depression, we need a much closer focus upon the emotional care currently provided (or not) postnatally.

1.6 Diagnosis of Postnatal Depression

Postnatal depression is often suffered privately. Because clinicians identify fewer than half of the women with this mood disorder, routine, periodic screening for at least a year after delivery is important (Beck et al 2006). Healthcare providers often fail to diagnose depression in new mothers because they are not familiar with the condition, thus do not recognise it and are unaware of how to diagnose it. In addition, mothers often hide their depression (Beck 1995). Because of the very serious consequences of depression, screening is critical. As suggested by Beck, depression is much more common than conditions that occur during pregnancy that are routinely screened for. For example, in a recent study 15% of women had

depressive symptoms in comparison to 2.4% with gestational diabetes, 5.5% pregnancy-associated hypertension and 10% with a pre-term delivery (McGarry et al 2009).

One major reason why PND is often missed is because mothers simply do not seek help for it, and may, as previously mentioned, even attempt to conceal it. An analysis of data from a recent study assessing 1,970 patients indicated that 60% of women with depressive symptoms did not seek treatment (McGarry et al 2009). A review of 40 studies indicated that a woman's inability to disclose their feelings was a common help-seeking barrier (Dennis 2005). Other women viewed depression as a 'matter of course' in becoming a parent. They also feared losing their babies and others did not want to bear the stigma and shame that they perceived was associated with any form of depression. A further barrier was when Health Professionals offered antidepressant medication as the only treatment alternative – this is still, sadly, the case in many areas. The combinations of a distinct lack of accurate knowledge about depression in addition to a number of myths regarding depression were significant barriers to seeking help or guidance.

One possible indication of maternal depression is the increased use of healthcare services. Webster et al (2000) states that mothers who are low in mood often make an increased number of visits to their GP or Health Visitor. In addition to the increased visits they were also significantly less satisfied with the treatment received from practitioners than 'non-depressed' mothers.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant, up to date literature relating to Postnatal Depression. The chapter will provide an overview of the prediction and the contributory factors for PND. Diagnostic methods used in relation to PND will be discussed in addition to a focus upon papers that have studied both current treatments and interventions. The effect that PND has on the infant's emotional and cognitive development will be addressed. The EPDS will be explored and both negative and positive aspects of the screening tool will be discussed. Antenatal screening will be visited. The chapter will conclude with a discussion about the perceived success of the treatments currently available and the scope for further research to be undertaken.

It may be beneficial to note that although there have been a number of recent noteworthy studies undertaken on the subject of PND, some of these studies were prior to the year 2000. Therefore a number of papers referenced within the following literature review are from this earlier period of time.

A literature review, in short, is a comprehensive study and interpretation that relates to a specific topic – in this case, postnatal depression (Aveyard 2010). Before commencing a literature review a research question needs to be identified, then to seek to begin to answer the question there needs to be a comprehensive analysis of any relevant literature using a systematic approach. This review should then, ideally, lead the researcher to the development of new insights that are only possible when each piece of relevant information is seen within the context of other information. Literature reviews are important because they seek to summarise all of the relevant literature available on any one particular topic. They can make sense of a body of research and subsequently present an analysis of the available literature so that the researcher does not necessarily have to access every single

individual report included in the review. There is an increasing amount of literature available within the health and social care profession and one cannot be expected to read and assimilate all of the information on any one topic (Crombie 2006). However, if a practitioner/researcher only read one or two papers they are likely to get a very misleading and probably very narrow and biased picture.

The literature review must be undertaken in a comprehensive, rigorous and systematic manner otherwise the results and the conclusions of the review may be unreliable. A thoroughly and comprehensive search strategy will help to ensure that key literature and texts on the topic are clearly identified. Reviewing the literature accurately provides a complete picture, which may remain partially hidden when a single piece of information is viewed in isolation. There needs to be a set format when undertaking a literature review in order to ensure that the review is comprehensive and that the articles, as suggested by Aveyard (2010), have not been 'cherry picked' to reinforce any argument that the researcher is wishing to make. A literature review which utilises some systematic principles has a number of key stages (Cormack 2000). The type of literature is identified and search terms are developed that are both logical and relevant to the search. Using inclusion and exclusion criteria, a search for literature using the relevant terms is performed through all of the appropriate databases. An electronic search by hand should also supplement this, focusing upon the most frequently cited journals and going through the reference list of the journal articles. Adhering to this process allows the researcher the optimum chance of identifying the maximum amount of literature.

2.2 Search Strategy

A strict protocol was adhered to during the search. Explicit and rigorous methods were used to identify, critically appraise and synthesize relevant studies in order to answer the predefined research question. The main focus of the literature search was online subject-specific electronic databases. These were accessed both at

home and via the academic library. Academic and general search engines were used. The academic search engines were, understandably, far more specific than the general engine, they allowed advanced searching using a different combination of words in addition to providing a direct access to academic books and journals.

The literature review was conducted using the following databases: Cochrane pregnancy and childbirth group trials register. This database contains trials identified from quarterly searches of the Cochrane central register of controlled trials, monthly searches of Medline and searches of over a hundred journals and the proceedings of a number of major conferences. In addition, the Cochrane depression, anxiety, and neurosis trials register, Medline (1980-2012), a broad database which covers all areas of both medicine and professions allied to medicine, Embase (1980-2012), CINAHL (Cumulative Index to Nursing and Allied Health Literature) (1985-2012), an American based resource for nursing and allied health literature. The British Nursing Index (BNI), this contains reference to British-based nursing and midwifery journal articles. Applied Social Sciences Index and Abstracts (ASSIA), an indexing and abstracting tool which covers health, social services, psychology, sociology, politics and education and Social Care Online, an open access database for social care journal articles, websites and government publications were all independently searched. Secondary references and review articles were scanned and experts within the field of PND were contacted either by telephone or email. Of necessity, only English literature articles were selected.

The reference list of each article obtained was examined for any studies/literature not identified from the databases search. The reference lists were scrutinized for further references that may have been useful to the study. Keywords were used, as indicated in the table below, in an attempt to capture the essence of the research question for the literature review. As explained by Aveyard (2010), appropriate keywords are essential if a comprehensive range of literature is going to be identified. The keywords were recorded and documented in order for the readers

of the review to be able to see how terms were identified, in addition to how many terms were identified. As many different words that describe PND as possible were written down, this included synonyms and phrases or terms that are no longer used to describe the condition. A number of these did not produce any documents at all but it was important to explore all terminology.

A general 'Google scholar' search was also carried out using the heading of 'studies on postnatal depression'. As mentioned previously, this database can be useful but did not have access to as many academic journals as the more subject-specific databases. Hand searches of relevant journals were also undertaken. Searching through the contents pages identified, in some instances, other relevant materials.

The same principle applies to author searching. Many of the key articles were by the same author therefore it was useful to carry out an author search. This identified other work published by the author that had not been identified in the electronic search. A combination of all of these strategies helped to ensure that the most comprehensive search strategy, and therefore the most optimal chance of retrieving the information relevant to the research question, was achieved. The reference list was sorted through to identify which references were most relevant to the research question. As explained by Aveyard (2010), the focus of the article is often unclear from the title alone. Indeed, studies were retrieved that were found to be irrelevant. Similarly, a number of studies were excluded by title alone that, when retrieved at a later point, were found to be very useful. It is preferable to read the abstract for each reference identified (Ragin 1994). The abstract provides a summary of the articles' content. The abstracts were invariably available on CINAHL and Medline.

As many relevant references were retrieved as possible but some were frustratingly, unavailable. On reflection, the most relevant literature was sourced

as effectively as possible to ensure that the research question could be answered. There are strengths and limitations to any search strategy but measures were attempted to overcome these – for example difficulty in accessing some articles electronically, therefore a number of academic libraries were visited. Themes were generated by using the universally recognised term 'postnatal depression'. This was subsequently expanded to include other key words as identified from articles and database MESH (Medical Subject Headings) terms. The more common terms are shown in the table below. The search of each database had no restrictions applied such as date or research based articles only as little attention appeared to be paid to postnatal depression until the 1980's, there was indeed very little research found in the 1970's. It seemed to be more commonly recognised in the late 1980's onwards.

As the terminology 'maternal mental health' and 'postnatal depression' revealed the largest number of articles then these two terms were entered into both ZETOC and SCOPUS alert services which emailed details of new literature as it was published throughout the time that this study was carried out. Articles available electronically from De Montfort University, Nottingham University, Staffordshire University and Derby University, NHS evidence or the Royal College of Nursing were obtained. Journals that were unavailable electronically but held as hard copy at other universities within the East Midlands region were identified and visits were made to obtain this material. The final source used to obtain published articles was via the inter-library loan service.

Articles were selected carefully following review of each abstract and with a focus upon the articles where the content was central to the main elements of the dissertation. Experts within the field of PND were also recognised and prioritised. Table 1 below outlines the findings of the search and the terms used to explore the databases as discussed in the previous paragraph. It is important to demonstrate the success of the searching strategy and which search yields the best results:

TABLE 1: Search Strategy

TERMS USED	NUMBER IDENTIFIED	REPEATS
• Postnatal Depression	898	298
• Postnatal Illness	596	186
• Maternal Depression	432	86
• Low Mood in New Mothers	302	97
• Postpartum Illness	316	82
• Postpartum Psychosis	91	26
• Baby Blues	118	53
• Depression in New Mothers	287	97
• Maternal Mental Health	305	142
• Postpartum Depression	453	249
• Perinatal Mood Disorder	94	41
• Maternal Attachment	81	54

2.3 Policy Context

The Department of Health has commissioned a number of reports relating to maternity services and maternal and child health - *Learning together* (2007*), Making it Better for Mothers and Babies* (1997), and the *National Service Framework for Children*, *Young People and Maternity Services Standards* (2007)). Each report has raised a concern as to how the high incidence of postnatal depression can be addressed. One of the most recent documents – *Maternity Matters, Choice, Access and Continuity of Care in Maternity Services* (2007), had specified that by the end of 2009 all women will have a choice about the care that they receive, an improved access to services, and the continuity of midwifery care and support in the community. One of the primary targets that was hoped to be reached by this improved antenatal and postnatal service was a reduction in the incidence of postnatal depression. This target has yet to be even remotely

achieved. There may be a number of explanations for this – a lack of financial input for further research to be conducted or support services to be established, a lack of interest/teaching in the subject of maternal mental health – it would certainly seem that mental health is still a relatively misunderstood and taboo topic (Kendall-Tackett 2010). Or, sadly, it may be that we simply cannot explain the phenomenon that is maternal depression and therefore struggle, as professionals, to tackle the rising number of mothers that are presenting with the illness.

2.4 Myths and Misconceptions about PND

Misconceptions surrounding PND are in abundance and are often believed by both the public and health professionals. Sword et al (2008) reviewed a number of the websites that were readily available to parents wishing to find out more information about PND. They discovered that 11 out of the 34 websites contained little or, in some instances, no relevant information about postpartum depression. Some even contained literature that could be potentially harmful to parents - for example one particular website suggested that postpartum depression did not have to cause long term implications, and could be resolved quickly with anti-depressants but breast feeding would need to be discontinued to enable this to happen! Prior to carrying out this study I also believed that a number of the perceptions were valid – as discussed below. In addition to my own beliefs, having liaised with numerous Health Visitors, General Practitioners and other members of the Primary Care Team, it has come to light that they also harbor the same misinterpretations. Unfortunately, myths and misconceptions can keep mothers from receiving the attention that they so desperately need. It was therefore of personal and professional interest to discuss some of the more common myths and explore why they are still, very evidently, believed in today's society (amongst both the public and healthcare professionals).

The first very common misconception is that Postnatal Depression is not that serious and can easily be remedied with a few good nights' sleep. This is certainly

a very prevalent myth – however this is less so following the Andrea Yates case. Andrea was the mother of five young children who she drowned in the bath while suffering from PND and psychosis (Morrell 2009). A further misconception is that Postnatal Depression is caused by a shift in oestrogen and progesterone (Small et al 1997). Medical students, in addition to women who had suffered from PND, were asked what caused the illness. The differences in their responses were striking (Small et al 1997). The medical students attributed depression to hormonal factors (notably oestrogen and progesterone) and to a woman's 'tendency to depression.' In complete contrast, the women themselves were more likely to attribute depression to social, physical health, life-event factors that included lack of time/space for them, feeling unsupported, isolation, financial stress and poor physical health (Cooper et al 1998). The women were correct but the hormonal hypothesis for PND certainly continues (Small et al 1997). Reproductive hormones have, at best, a tangential role in depression in new mothers. However, we now understand that a variety of psychosocial, psychological and immunological factors have a hugely important role to play in the development of depression. Indeed, the knowledge base on this subject has rapidly expanded over recent years presenting a more holistic and intrinsic picture of what can happen in both the antenatal and postnatal period.

Another strong belief is that Postnatal Depression is more common in white, middle-class women, a belief shared by many Health Visitors and Midwives (Small et al 1997). There is absolutely no evidence to support this statement at all. Post-partum depression affects women in many different cultures and across all societies. The less affluent are, in fact, considered to be potentially at a higher risk (Martinez et al 2003).

Many practitioners believe that the cause of PND is unknown. Indeed the causes of depression do vary greatly from woman to woman - but studies have identified the major risk factors for depression – a previous history of mental health issues, a

traumatic birth, complications in pregnancy, domestic violence, a bereavement, insufficient family and social support, a self-critical personality, a perfectionist, heightened anxiety and a difficult infant temperament, have all been cited as being major contributory factors (Stern et al 1983). And because we do have an idea of risk factors pre-disposing to PND, professionals are gradually becoming more effective at recognising and treating it.

The idea that PND will eventually disappear without treatment is entirely misfounded. Unfortunately, untreated PND can, for some women, never go away and subsequently becomes a chronic mental health problem. Zelkowitz (1995) identified 48 couples where one or both partners were suffering from PND. Four months later 65% of the mothers and 70% of their partners were still symptomatic. In a second study, mothers were assessed at two, four and six months post-natally. Mothers who were depressed at two months continued to be depressed at each subsequent assessment point throughout the first year with very little or no improvement noted (Beeghly at al 2002).

2.5 Epidemiology and Causation of Postnatal Depression

Epidemiological studies have consistently shown that the prevalence of non-psychotic major depressive disorder in the early months after delivery is around 12-25% (O'Hara et al 1991, Beck et al 2006). Although this rate does not represent an elevation over the non-post-natal base rate, the inception rate for depression does seem to be elevated in the initial three months post-natally compared with the following nine months (Cooper et al 1998, Cox et al 1993). The duration of PND is very variable, some episodes typically remit spontaneously by six months, and some mothers can have residual symptoms up to a year and beyond.

2.6 Aetiology

There is little evidence to support a biological basis to post-natal depression (Kendall-Tackett 2010). O'Hara et al (1991) conducted extensive research in to

steroid hormones in women during the initial six weeks after delivery, there was no conclusive evidence linking these hormones to the development of PND. It has been suggested that, in a small sub-group of those experiencing PND, there may be a thyroid dysfunction (Pedersen et al 2007). Although this hypothesis does merit attention if substantiated, it does remain a possibility that a thyroid dysfunction may be secondary to immunological changes brought about by stress.

The presence of the 'baby blues' in the period immediately post-natally has been found to be related in some studies to the subsequent development of PND, but there has not been any hormonal basis to this association identified (O'Hara et al 1991, Meltzer-Brody et al 2008). Obstetric factors are important in a vulnerable subgroup of women, among those with a history of depressive disorder; complications during delivery have also been associated with an elevated rate of PND. Astbury (1994) found that women were at an increased risk of depression if they experienced an assisted vaginal delivery or caesarean section, were dissatisfied with their antenatal care, had an epidural or anaesthetic during delivery, or felt that pain control during labour was ineffective. This may be an indicatory factor for early intervention from a peer support worker – perhaps prior to the administration of the EPDS.

The consistent finding of the epidemiological studies carried out to date is that the major factors of aetiological importance are largely of a psychosocial nature (Hunker et al 2009). The occurrence of stressful life events in general, unemployment, marital conflict, and the absence of social and emotional support, consistently demonstrates a raised risk of PND. A psychiatric history is also commonly reported to be a substantial risk factor for PND, in particular a history of depressive disorder.

2.7 Prediction

Progress in the development of a predictive index for PND has been hampered by two main factors according to Cooper and Murray (2003). They explain that the epidemiological studies from which information on predictive variables have been identified have involved relatively small samples: but even when samples of several hundred women have been involved, involving large numbers of mental state assessments, the number of cases of depression have consistently been relatively small.

The other factor, as suggested by Cooper and Murray, is that although several antenatal variables have been found to be systematically related to the development of PND, the individual and interactive relationships are relatively weak. They conclude that predictive studies, involving rather few subjects, are inevitably going to prove unsuccessful. Indeed, the largest scale prospective predictive study to be carried out revealed that such factors as the absence of social support and a previous history of depression, the most reliable predictors of PND, do no more than double the odds over the base rate risk (which is thought to be 12-15%) (Cooper et al 1996).

Prediction of PND could be greatly improved if account were taken of certain post-natal factors. In a study carried out by Murray et al (1996) the focus was placed upon the impact of neonatal factors on the course of maternal mood. The results repeatedly showed that a high score for ‘maternity blues’ and certain neonatal factors (irritability and poor motor control) were significantly related to the onset of PND. Self-esteem, self-efficacy and expectations are three concepts that consistently refer to a woman’s adjustment to her role as a mother, what she expects of herself and how inwardly confident she really feels. These concepts are proven to be closely related and tent to interact (Kendall-Tackett 2010).

In a meta-analysis of 84 studies, Beck (1995) found that self-esteem had a moderate effect on PND. Low self-esteem at one month post-natally predicted depression at four months in another recent study of 465 women (Chaudron et al 2001). A prospective study of 191 low-income, inner-city women found that self-esteem was related to lower levels of depression in both the prenatal and postnatal periods (Ritter et al 2000).

Lutenbacher (2002) carried out a study on 53 low-income single mothers. Abuse in childhood and a low self-esteem strongly predicted depressive symptoms and these symptoms had a large impact on the mother's reactions to their own babies. Everyday stressors, when combined with depression, strongly predicted higher levels of anger in the women. Again, these could be mothers who are prioritised for early support from a PSW.

Beck (2002) found that expectations played a large role in PND at several different levels. Beck (2002) describes that both mothers and professionals who care for women postnatally still harbour the belief that motherhood brings 'total fulfilment to women.' This, naturally, is not helpful and often creates a total lack of understanding as to why a new mother is not 'blissfully happy.' Beck noted that first time mothers were more prone to the myth of 'perfection', whereas multiparous women's expectations focused upon simply trying to cope with the new addition to their families. Support from a fellow mother who has struggled with maternal low mood and subsequently can empathise with the new mother may help. Comfort and reassurance may be gained from somebody recognising and acknowledging that 'total fulfilment and ecstasy' is not being felt and can assist in the normalisation of feeling anxious, tearful and despairing.

In brief summary, following a study of the relevant research to date, it would appear that women are more likely to experience PND if they have unrealistic expectations of themselves as mothers and of their babies, are unsupported by

either family or close friends, isolated and, in some instances, have suffered from low mood in the antenatal period. If they have low self-esteem and feel inadequate as mothers, they are also more likely to be depressed.

2.8 Cognitive and Emotional Development and its Relationship to Postnatal Depression

This section will explore literature about an infant's cognitive and emotional development and the relationship to postnatal depression. There has been considerable recent clinical and research interest in postnatal depression and this has been largely provoked by the accumulating evidence that postnatal depression is associated with disturbances in the infant's cognitive and emotional development (Bornstein et al 2011). This evidence has renewed concern about the epidemiology of PND, its aetiology, methods of prediction and detection, and the most appropriate form of management. There have been several relatively recent prospective studies of samples of women with PND and their children. These studies indicate a definite association between maternal mood disorder and an impaired infant cognitive development. Bornstein et al (2011), in a study carried out in Cambridge, found that children of mothers who have had PND performed significantly less well on cognitive tasks at eighteen months of age than children of unaffected mothers – particularly boys. Two studies carried out in London, (Morgan et al 2006 and Barroso et al 2011), found that, particularly in the more socio-economically disadvantaged areas, this effect was still apparent when the children were between four and five years old. A poor emotional adjustment has been shown to be similarly associated with PND (Coghill et al 1986, Sharp et al 2001). The majority of studies that have systematically examined infant attachment in the context of PND have found an elevated rate of insecure attachment (Murray et al 1997, Lyons-Ruth et al 2000).

There is evidence that these emotional problems persist. A follow up of the Cambridge cohort found that the five year old children of mothers who had suffered

from PND were significantly more likely than their peers to be rated by their teachers as 'emotionally disturbed' (Sinclair et al 1998). One major conclusion from these studies is that the mechanism mediating the association between PND and adverse child developmental outcome is the impaired pattern of communication between the mother and her child.

In a study by Beeghley et al (2002), it is suggested that there may be a direct pernicious impact on the child of exposure to the parental disorder. He also suggests that there may be an indirect impact via the effect of the parental disorder on interpersonal behaviour in general, and parenting in particular. Finally his study displayed an impact via a third factor which was social adversity commonly associated with psychiatric disorder. Beeghleys' study concluded that postnatal depression poses a risk for the mother-infant relationship and infant developmental outcome by the adverse effects displayed by mothers suffering from the illness (maternal cognitions and parenting style). He summarised that the impact is likely to be more pernicious where the depressive episode is both severe and prolonged, and where it occurs in the context of personal and social adversity.

Coghill et al (1986), prior to Beeghleys' research carried out a longitudinal study on 94 women and their first born children. The focus was upon maternal mental health during pregnancy and after delivery. The infant's cognitive functioning was assessed at four years without knowledge of the mothers' psychiatric history or current well-being. Significant intellectual deficits were found in the children whose mothers had suffered with depression - but this was only apparent if the depression had occurred in the first year of the child's life.

These studies are conclusive in the respect that it is important to diagnose and establish support services within the initial stages of an infant's life, ideally prior to any negativity in the relationship between the mother and her baby – which has

been shown, within these studies, to have an impact on both infant and mother for many years to come.

Murray et al (1999) summarise the effect following their participation, and lead, in a number of studies focusing upon cognitive development and depression. Cooper strongly believes that maternal depression is associated with a substantially increased risk of various forms of adverse outcomes in children. Some of this increased risk is likely to be mediated genetically (McGuffin et al 1988, Beeghley et al 2002), but it has been shown that parental depression is closely associated with impairments in parenting with an increase in family discord, disruption and disorganisation (Beck 1995).

Research studies have increased an understanding in several important ways. Studies have explicitly recognised that maternal depression is a risk indicator, and not necessarily a risk mechanism (Cooper et al 1998). Studies have looked at the need to examine two-way effects (Beeghley 2002, Lyons-Ruth et al 2000). That is, parents undoubtedly influence their children, but children have equally important effects on their parents. When researchers first began to appreciate this possibility, they emphasised the determination of the relative importance of each direction of effect. A number of research studies then went on to demonstrate the importance of cycle interactions by which child characteristics shaped parental behaviour, which, in turn, influenced the course of child behaviour (Martin 2010, Paykel et al 1999). The studies describe the recognition of the need to consider the social context of the parent-child interaction.

Parent-child dyads are shaped by the family context in which they arise and family interactions, in turn, are influenced by the extended kin network and by the social nexus provided by both peers and the community. Although a number of studies have looked at cognitive development and maternal depression, the concepts and findings discussed by the authors have potential implications for a much broader

range of issues, both theoretical and practical, with respect to early psychological development. Developmental questions can be tackled rigorously while still retaining sensitivity to the subtleties of parent-child interaction and to the nuances of individual psychological development.

Kendall-Tackett (2010) suggests that the impact of maternal depression on an infant actually begins during pregnancy. Field and colleagues (2006) noted that women who are depressed in pregnancy are more likely to deliver prematurely and that their babies are more prone to requiring intensive care for serious post-natal complications, such as bronchopulmonary dysplasia and intraventricular haemorrhage. Depressed mothers are also at an increased risk of having babies who have a low birth weight and are small for their gestational age (Hay et al 2008). This would support the opinion of Beck et al (2006) who strongly advocates the screening of all pregnant ladies periodically throughout their pregnancy – however, cost implications would be huge and there is no concrete evidence as yet to support this statement. A suggestion may be that support begins in the antenatal period to mothers identified as being at an elevated risk. Peer support in the antenatal period may potentially assist in a reduction of PND in the postnatal period – this is certainly an area for further consideration and research.

In a prospective cohort study in France of 681 women, the rate of spontaneous pre-term birth for depressed women was more than double that of non-depressed women (9.7% vs. 4%) (Drayan et al 2006). A further study in Goa, India found that mothers who were depressed in their third trimester were significantly more likely to have a baby with a low birth weight than their non-depressed counterparts. The more depressed the mother was the higher the risk (Patel et al 2005). This was relevant even after controlling for other factors that can influence birth weight such as maternal age, maternal and paternal level of education, social status and income.

Orr (2004) suggests that anxiety can increase the risk of pre-term birth. In a study of 1,820 women from Baltimore women with high levels of anxiety about their pregnancies were significantly more likely to have a premature birth. Indeed, women with the highest levels of pregnancy-related anxiety had three times the risk of preterm delivery compared with women considered to be increasingly less anxious. Again, these findings were consistent even after controlling for traditional risk factors for premature delivery such as first or second trimester bleeding, misuse of drugs or alcohol, unemployment, a previous history of still or premature birth, smoking in pregnancy, low body mass index, maternal education, social status or age.

A further American study displayed similar statistics (Glynn et al 2004). Pregnant women were assessed at 18 to 20 and 30 to 32 weeks gestation. The sample was from mixed ethnic groups (Hispanic, White, African and other). Elevated risk for preterm birth was associated with increased stress and anxiety. Again, these findings persisted even after controlling for obstetric risk, pregnancy-related anxiety, ethnicity and prenatal life events. The authors strongly concluded that prenatal stress is an important predictor of a premature delivery. This study would lend itself to the argument for support to be provided antenatally for those women considered to be at an elevated risk of PND. This is certainly an area for further research in the future.

However, not every study has found a conclusive relationship between depression and low birth weight or premature delivery. In a large cohort study of 10,967 women, researchers found that women who were depressed during pregnancy were indeed significantly more likely to have low-birth-weight babies. Interestingly though, once the researchers controlled for confounding factors, with the incidences of smoking being the greatest, the relationship disappeared (Evans et al 2001). The authors concluded that there was in fact no independent effect of depression on low birth weight. However, given the likelihood that depressed

women are increasingly likely to smoke and that low mood may mediate smoking, the authors' statement about a lack of relationship may be a little premature.

Some of the increased risk of premature birth may be due to elevated levels of stress hormones. Field et al (2006) studied 70 depressed and 70 non-depressed women; participants were assessed during their second trimester and during the neonatal period. None of the research participants were being treated for depression or taking antidepressant medications. Mothers with depressive symptoms had higher levels of prenatal cortisol and norepinephrine, lower dopamine and serotonin, and a higher percentage of depressed mothers (34%) had babies who had a low birth weight compared to non-depressed mothers (14%). Postnatally the infants had higher levels of cortisol and lower levels of dopamine and serotonin.

Depression has several possible ways to have an impact on birth weight and gestational age. Cortisol changes the placental environment and directly crosses the placenta. Corticotropin releasing hormone (CRH), a precursor hormone to cortisol induces vasodilatation, causing the uterine artery to constrict and subsequently reducing blood flow to the foetus. This may restrict oxygen and nutrient delivery thus resulting in a premature birth. CRH also triggers parturition. Norepinephrine can affect foetal growth via its effects on the cardiovascular system. It is related to uterine artery resistance and indirectly to blood flow and foetal growth in animal studies. However, it does not cross the placenta (Dagan et al 2006). These hormone levels can also be influenced by other mood states that often co-incide with depression such as stress and anxiety.

After delivery antenatal depression can still affect the infant. A number of physiological indicators are more common in infants of antenatally depressed mothers. Field et al (2006) states that abnormalities in electroencephalograms (EEG's) have been observed in infants of depressed mothers at three months of

age. In addition, babies of depressed mothers had depressed affect and right frontal EEG asymmetry. These babies were all born at term and had no evidence of any congenital abnormalities. Right frontal asymmetry is an abnormal pattern found in chronically depressed adults, and is a physiologic marker of depression in babies. (Field et al 2006).

Sanderson et al (2002) in a cohort study of 32,984 births in Sheffield between 1988 and 1993 identified, somewhat alarmingly, three significant risk factors for Sudden Infant Death Syndrome (SIDS). These were smoking, a low social status and an elevated score on the Edinburgh Postnatal Depression Scale. The researchers concluded that a high EPDS score, and by implication high depressive symptoms, were possibly implicated in SIDS. Further research would be needed in this area to determine if this is a robust finding.

There is strong evidence that postnatal depression has a deleterious effect on a child's ongoing development. The infant's extreme dependency on their carer, their sensitivity to interpersonal contacts and the fact that, in the majority of cases, the mother constitutes the child's primary environment in the initial postnatal months, makes the question of the impact of depression occurring at this time one of particular importance (Murray et al 1997).

A number of studies have examined the one to two year old infants of mothers who have had postnatal depression (Lyons-Ruth et al 2000, Stern et al 1983, Murray 1992, O'Hara et al 1991). These studies have generally found an association between early maternal depression and adverse cognitive and emotional infant development. Two studies have reported on the cognitive outcome of 12 to 18 month old infants of mothers who had had postnatal depression. Lyons-Ruth et al (2000) in a comparison of American mothers and infants found that increased levels of maternal depression were significantly related at one year to poorer infant

mental and motor development. This association was still present when maternal IQ had been controlled.

Similarly, Murray, in a comparison of the development of a British community sample of full term healthy infants of primiparous women who had either remained well or had been depressed postnatally, found a significant difference between the two groups of infants in terms of a number of indices of cognitive development (Murray 1992). Thus, at an 18 month follow-up, compared with the infants of postnatally well mothers, infants of mothers who had had postnatal depression were significantly more likely to fail on stage V of Piaget's object performance task, a key measure of the infant's capacity for mental representation. The boys of mothers who had had post- natal depression performed particularly poorly. There does not appear to have been any further research as to why boys would be more affected by PND than girls. Again, this would be an interesting consideration for a further study.

The impact of postnatal depression on the emotional development of infants has been studied in three ways (Cooper et al 1998). An examination has been made of the infant's interpersonal functioning when in direct contact with the mother; the quality of infant attachment and finally, an account has been taken of the level of behavioural problems. Each examination showed a negative outcome for those babies whose mothers were/had suffered from PND in comparison with mothers who had not. Results indicated less effective sharing, a lower rate of overall interactive behaviour, less concentration, higher incidence of behavioural difficulties (poor sleep pattern, eating problems, temper tantrums and separation difficulties) and generally more negative responses overall. Taken together these studies, as suggested by Glynn et al (2004), attest to a significantly raised level of emotional disturbance in late infancy in the children of mothers who have suffered from PND.

Waters et al (2000) wrote of primary maternal preoccupation; the way in which mothers and babies look at and often mirror each other. He goes on to discuss the fact that the baby will mirror its mother's expression, and perhaps also get an inkling of how the mother feels. Schneider et al (2001) developed this concept, and in conversations with a two month old showed how mother or father and their baby, can converse simply by looking at each other. Parents vocalise and the infant replies with sounds or simple 'mouthing'. Remarkably they take turns and the rhythm becomes that of a conversation. Sadly, when a mother is postnatally depressed this process is interfered with and subsequently 'the conversation' goes awry.

Murray (1992) discusses the result of an infant being with a post-natally depressed mother over a period of time – a mother who may indeed have a blank, expressionless face, or mistimed her signals to her baby. She explains that the baby will devise some kind of behaviour to deal with the mother's lack of attention. One reaction may be to give up trying to attract attention and withdraw, and, as studies have shown, remain withdrawn even after the depression has resolved (Stern et al1983, Davis et al 2007). The mother and her baby will subsequently continue to be 'out of touch' with one another (Murray 1992). This may progress to the baby being out of touch with sleep, feeding and even development may be impaired. Morrell (2000) states depression is not only a state of mind that impairs the mother's ability to concentrate on her child. She believes that it may be useful to start the other way round with the hypothesis that some vulnerable mothers are thrown into a state of depression by their very attempts to actually focus upon their new-born infant.

To these mothers, the 'life and death' communications from a new born baby, both directly and indirectly, can be terrifying, alien and unbearable. Some mother's withdraw into themselves in an effort to protect themselves from actually noticing the intensity of their baby's communications. Evans et al (2001) observed that in

some instances mothers cannot notice their babies' signals because they remind them of their own unmet needs as babies. Depression and withdrawal in the mother may sometimes be an extreme version of this inability to notice - because noticing is simply too painful.

Stern et al (1983) shows how the infant attempts to remain close to their depressed mother even when she is eluding him. Such attempts may include increased imitation, identifying with their mother's mood and diminution of self-agency. The infant imitating their mother's expression may indeed start to feel how she is feeling. Another infant's route to being with their mother is watchful care-taking, looking after her, stimulating her and bringing her back to life. This may have a positive effect and the smiling baby may indeed lift the mother's mood. Alternatively the mother may feel frustrated that the baby is 'out of tune' with her low mood and this may lead to an active baby becoming hyper-active as a toddler and subsequently being labelled as having an attention deficit disorder.

The proposal that experiences early in life have profound effects on development is found in a number of theoretical traditions, including embryology and psychoanalysis (Freud 1938). Perhaps the most familiar human example of a sensitive period effect is in the realm of visual development - if a child's squint is left uncorrected beyond two years of age, a child cannot achieve binocular vision.

Murray (1991) researched a detailed examination of the effect of a mother's depression on intellectual development in the first year of life. Outcome measures included standardised assessments of development and language and observations of the infant's accomplishments of one of the major cognitive tasks in infancy – the understanding of object permanence. Object permanence is used to describe a child's ability to know that objects continue to exist even though they can no longer be seen or heard. The concept of object permanence plays an important role in the theory of cognitive development created by Jean Piaget

(1983). In order to determine if object permanence was present, Piaget would present a toy to an infant before hiding it or removing it. Some of the infants would appear confused or distressed by the loss while other infants would instead look for the object. Piaget believed that the infants who were upset that the toy had gone lacked the understanding of object permanence – while those who searched for the toy had reached this developmental milestone. Those infants whose mothers' experienced postnatal depression were reliably more likely than other infants to fail the object permanence tasks at the age of nine and eighteen months. Infants whose mothers had a history of depression prior to the birth but had not experienced postnatal illness were not reliably different from the children of well women.

The negative impact of maternal depression has also been documented in school age children (Lieb et al 2008). In an American study of 5,000 mother-infant pairs, children of depressed mothers had significantly more behaviour problems and lower vocabulary scores at age five years than their peers. In this particular study, mothers were assessed for depression during pregnancy, immediately post-partum and when their children were six months and five years old. Severity and chronicity of depression were related to more behavioural problems, as were more recent episodes of maternal depression.

Murray et al (1999) found that children of depressed mothers were more likely, at school entry, to express depressive cognitions such as hopelessness, pessimism and low self-esteem especially when exposed to a mild stressor. However, the researchers did note that much of this relationship can be accounted for by current maternal hostility toward the child.

In a further study (Ashman et al 2002); maternal depression during the first two years of a child's life was the best predictor of elevated baseline cortisol in response to a mild stressor at age seven. Luoma et al (2001) found that eight to

nine year olds, whose mothers had postnatal depression, displayed lower competence scores. Social competence included parents' reports of children's activities, hobbies, tasks and chores, functioning in social relationships and academic achievements. Mothers were assessed for depression prenatally, postnatally, and when their children were eight to nine years old. Mothers' current depression was also associated with low social competence and low adaptive functioning.

Negative findings continue at age 11 (Luoma et al 2001). Children of mothers who were depressed at three months post-partum had significantly lower IQ scores and had a number of problems in school including attentional and mathematical reasoning difficulties. They were increasingly likely to be in special education. The effect was particularly pronounced for boys. Such startling findings that are so life changing in their effect on mother, child, and other members of the family do indicate that an early intervention may be an effective option.

There have been further recent studies on the effect that postnatal depression has on children as they enter into adulthood (Barry et al 2014). This study concluded that the offspring of depressed mothers have elevated basal levels of the stress hormone, Cortisol, at the onset of puberty. This supports the earlier research carried out by Murray et al (2011) and Hammen et al (2012). Participants were part of a prospective longitudinal study of the development of children of both postnatally depressed and well women.

Cooper et al (2014) studied an attempt to prevent postnatal depression by targeting the mother-infant relationship. The purpose of the study was to investigate whether providing an intervention which focused on enhancing the quality of the mother-infant relationship would prevent the development of PND and the associated impairments in parenting and adverse effects on child development. The mothers were targeted in the antenatal period. The study revealed that the intervention had no impact on maternal mood, the quality of

parenting behaviors, or infant outcome and therefore cannot be recommended in the prevention of PND and its associated problems.

There is also increased risk of depression in children of depressed mothers that lasts well into adulthood. Lieb et al (2008) studied 2,427 young adults and found that depression in either their mother or their father increased the risk of depression in the subjects.

Interestingly, paternal depression was associated with an earlier onset of depression, an increased severity, impairment and recurrence in the children studied. Abramowitz et al (2003) studied the occurrence of PND in fathers and concluded that, in a number of participants, post-natal obsessive compulsive disorders coincided with their wives' deliveries. These obsessions were very similar in content to the obsessional thoughts of new mothers. The fathers responded with feelings of shame and guilt.

This raises the question as to whether screening should be carried out on fathers as well as mothers. Studies have shown that the impact of paternal depression has a profound impact on the child too (Abramowitz et al 2003, Sharp et al 2001, Schneider et al 2001, Beck 1995) but, despite this knowledge, such support has not been offered to the father in the UK. This is a question that needs to be addressed as, indeed, how can a partner effectively support his partner if he is feeling low in mood too? It becomes a cycle of despair with neither partner being able to provide the required compassion and understanding to 'lift' the mood of one another.

Despite the fact that maternal mental health problems have been studied extensively the literature on paternal perinatal mental health is relatively scarce. However, Koh et al (2014) studied paternal mental health in early pregnancy, late pregnancy and six weeks postpartum. Results demonstrated that a significant

proportion of expectant fathers manifested depressive symptoms during the perinatal period. Paternal antenatal depression could significantly predict higher levels of postpartum depression. Massoudi et al (2013) discussed the negative effect that depression in new fathers may have on a child's mental health and development – independently of maternal postnatal depression. Ramchandani et al (2005), in a large, longitudinal study, found that depression in the father at two months postpartum was found to be associated with a higher risk of behavioral problems in the child at three and a half years. Depression in the father at nine months postpartum has also been found to be associated with a poorer expressive vocabulary in the child (Paulson et al 2009). Moreover, studies have shown significant couple morbidity – implying that some children are in a highly adverse situation if both parents are depressed (Paulson and Bazemore 2010, Ramchandani et al 2008). However, there is no formal screening for depression either antenatally or postnatally for fathers – and, as previously mentioned, studies are scarce. This is an area that urgently requires further investigation as the long term implications on their child's emotional and behavioral development could be disastrous.

2.9 Peer Support Workers (PSWs)

A number of studies have demonstrated that one of the key risk factors for post - natal depression is social isolation and a lack of social support (Appleby et al 1997, Dennis 2005, Cooper et al 1998) and if social support was more readily accessible the incidence of PND may be reduced. An extensive literature search was carried out around the subject of Peer Support – not only within the spectrum of PND but also when supporting breast feeding mothers, colleagues, school age children and University students. A range of peer support models, their present scope and future potential was examined. While the peers who provide support are united under the common theme of 'peer support', they often do so under very different labels such as peer counsellors, listeners, educators, facilitators, mediators,

helpers or learning assistants. For the purpose of this study the focus remained upon peer support workers.

Peer support begins with the natural willingness of individuals to act in a co-operative, friendly way towards another individual. Successful peer support systems build on this intrinsic quality and create structures which facilitate a workers potential for responsibility, sensitivity and empathic caring (Sharp et al 2001). The Oxford English Dictionary defines a peer as 'an equal in ability, standing, age etc.' People have a variety of components to their identities such as age, gender, ethnicity, social class or certain experiences such as drug taking, bereavement or separated parents. Peer support can take place between people where there is a sense of being peers in any of these ways, and as circumstances change this relationship can change over time.

A literature review was conducted using Cochrane central register of trials, Medline and hand searches of over thirty journals and the proceedings of major conferences. In addition to this, contact was made with a number of organisations that offer a variety of Peer Support interventions (The Children's Fund, Connexions, Umbrella, local Children's Centres, Cruse, Relate and Sure Start). Contact was established via email and a number of meetings were carried out to discuss Peer Support and interventions that had been funded and evaluated. There have been a number of studies looking at the role of a Peer Support Worker with reference to the initiation and sustaining of breast feeding. MacArthur et al (2002) provided an antenatal peer support service which comprised of a minimum of two contacts with women to provide advice, information and support from approximately 24 weeks gestation within the antenatal clinic or home setting. The peer support workers were from a similar ethnic and socio-demographic background to their clinic population.

The results showed that the provision of such a worker did not increase the initiation rates of breast feeding. Ethnicity, parity and mode of delivery independently predicted initiation of breast feeding but randomisation to a worker did not. However, the researchers did conclude that if the service had included more home based contact there might have been more of a positive outcome, although in the two other UK trials peer support was entirely home based and no improvement in breast feeding occurred (Muirhead et al 2006, Hendrick et al 2001). The service might have needed a more intensive approach. In the two US trials substantial improvements in the initiation of breast feeding were shown with only one and three antenatal contacts alongside peer support in hospital (Chapman et al 1988, Anderson et al 2010). There is a need for a further more intensive, universal home based service but this would, of course, require greater investment.

Jolly (2012) conducted a systematic review of peer support for breastfeeding continuation, focusing primarily upon an analysis of the effect of setting, intensity and timing. The study concluded that although peer support interventions increased breast feeding continuation in low or middle income countries, especially exclusive breastfeeding, it did not seem to apply in high income countries, particularly the United Kingdom, where breast feeding support is part of routine, postnatal healthcare. Peer support of low intensity did not seem to be effective. The research team concluded that policy relating to the provision of peer support should be based on more specific evidence on setting and any new peer support service in high income countries would need to undergo concurrent evaluation.

Dennis et al (2009) studied the effect of a proactive, individualised telephone based peer support service (mother to mother) initiated within 48-72 hours of randomisation, provided by a volunteer recruited from the community who had previously experienced and recovered from self-reported postnatal depression. The workers were also required to attend a four hour training session. The main

outcome measures were the Edinburgh Postnatal Depression Scale, structured clinical interview, UCLA loneliness scale and use of health services. The results concluded that telephone based peer support can be effective in preventing postnatal depression among high risk women. Indeed, women who received peer support were at half the risk of developing postnatal depression at 12 weeks postpartum than those in the control group.

The study did receive some criticism. Morrell et al (2009) said that she did not see the strength at all in the telephone screening and asked how it was known that the individual at the end of the phone were who they said that they were. She believed that individual contact would have been more effective.

The Edinburgh Postnatal Depression Scores are not diagnostic, it is simply a tool that may highlight a potential problem, and personal contact would have been a more effective interaction. Of the 21470 attempted screens, 4400 (20.5%) could not complete the study because of language barrier. This means that the level of education of the participants had some influence and therefore, Morrell (2009) writes, should have been considered as an inclusion criterion.

However, despite a thorough literature search there still does not appear to have been any studies that offer direct face to face contact with a Peer Support Worker within a setting of the mother's choice.

There have been a number of related studies which have concluded that interventions to prevent postnatal depression are more likely to be successful if they are individually based, initiated postnatally and target high risk women (Dennis 2005, 2004). In addition to this research articles have linked depressive symptoms with smaller social networks, fewer close relationships and lower perceived adequacy of social support (Kleinman 2009, Dennis 2003). Furthermore, findings provide evidence that lay people who have experienced a

similar health problem or stressor can have a positive effect on psychosocial well-being (Dennis 2004, Coghill et al 1986). There are several possible explanations offered as to why the peer volunteers prevented depressive symptoms in the first 12 weeks post-partum. Members of a social network can exert a salutary influence on mental health by role modelling health relevant behaviours (Dennis 2003). Integration in a social network might also directly produce psychological states, including a sense of purpose, belonging and recognition of self-worth.

Morrell et al (2000) studied the cost and effectiveness of community postnatal support workers. The intervention incorporated up to 10 home visits in the first postnatal month of up to three hours duration by a community postnatal support worker. The conclusion was that there was no significant health benefit of additional home visits when compared with traditional community midwifery visiting. In addition there were no financial savings to the NHS over a six month period after the introduction of the postnatal support service.

The literature review provided somewhat inconclusive studies as to the effectiveness of any peer support intervention. The results were inconclusive and contradictive and it is very apparent that there is a great deal more work to be done within this field of research. Despite an intensive search, it was surprising to find that, to my knowledge, there had not been any studies focusing upon one to one peer support within the home environment or a venue of the mother's choice. Although the studies undertaken do, on the whole, suggest that preventive approaches are warranted, there are very little papers that have actually carried out such intervention. To further investigate postnatal depression as a public health concern, future preventive trials need to be widely researched.

2.10 Psychosocial support

There are other forms of psychosocial support that have been explored. Segre et al (2010) evaluated the effectiveness and acceptability of home listening visits.

Listening visits were developed for health visitors with little or no prior mental health training (Holden et al 1989). The core techniques of this two-part non-directive counselling intervention are the exploration of a client's problems through reflective listening and collaborative problem solving.

Evaluations of listening visits have been positive (Cooper et al 2003, Morrell et al 2009) and in the UK, listening visits are now recommended evidence-based practice for mild to moderate postpartum depression. Health Visitors offer depressed mothers four to six sessions routinely, in their own home. Each visit should last approximately one hour. As a non-directive intervention, the specific course of the visits is based on the mother's need. Listening visits have been associated with significant improvement in life satisfaction – particularly the participant's relationships with others (Morrell et al 2009). Listening visits have been advocated as a tool that can be used by health visitors to stem any gap in treatment services for women who otherwise may not have received the care and attention they desperately need. In relation to the current study this is also a 'gap' that could potentially be accommodated by a peer support worker.

Befriending schemes are a further support mechanism that can be used to assist vulnerable clients. One such scheme, Newpin (New Parent and Infant Network), aims to prevent child abuse (Cox et al 2001). Newpin was created in response to the needs of new mothers experiencing issues such as isolation, mental health, domestic violence, social disadvantage, low self-esteem and those who were considered at elevated risk of physically or emotionally harming their child or children. Newpin provides a befriending service which offers an intensive therapeutic approach to break the cycle of intergenerational abuse and neglect. Evaluation of the service comprised of follow up interviews with the mothers and developmental assessments of the children - with positive outcomes.

Befrienders are usually volunteers and their support often incorporates various forms of supplementary assistance and social activities. Perhaps not a dissimilar support process to that offered by the PSW's within this study but the befrienders do not necessarily have to have shared a similar life experience. It is concluded that well conducted befriending schemes can make a significant contribution to the mental health of a broad spectrum of clients (Cox 1993).

Service users are becoming more prevalent within, not only a patient supportive role, but also within the field of education. Involvement of people who are patients, carers and service users is now widespread and characterised by great diversity (Health Foundation 2011). There is strong evidence that patient/user involvement has long term benefits for all involved including learners, educators, institutions and patient/users, across a wide range of domains, such as knowledge, skills, attitudes and behaviors (Howe et al 2003). Positive outcomes have consistently been recorded in both the sense of supporting fellow clients/patients and within the education sector (Happell et al 2009). Learners have reported finding the input from service users both beneficial, insightful and realistic, and clients/patients have found the support reassuring, comforting and informative (Hanson et al 2007).

A number of articles have been published within the past two years exploring the option of on-line cognitive behavioral training for the prevention of postnatal depression in 'at-risk' mothers (Jones et al 2013, Milgrom 2013). The mothers taking part in the study did feedback that having such an accessible tool was a positive benefit but that they missed the personal interaction gained from having face to face contact.

2.11 Post-partum Psychosis

Post-partum psychosis is the most serious form of post-natal mental illness. Although psychosis is not the focus of this study, it is important to mention it because of its severity, and its co-occurrence with depression. It occurs in 0.1-

0.2% of all new mothers, and most episodes begin between days three and fourteen post-natally (Rapkin et al 2002). In two studies of women hospitalised for severe post-partum illness in Edinburgh (Davidson and Robertson 1985), the three most common causes were unipolar depression, bipolar depression and schizophrenia. Transient organic psychosis was also a diagnosis for a small percentage of subjects in both studies. Miller (2002) noted that the most common differential diagnoses for post-natal psychosis include major depression with psychotic features; bipolar disorder; schizophrenia and brief reactive psychosis. Some medical conditions can be related to post-natal psychosis, and should be ruled out before diagnosing these symptoms is due to mood disorders. These conditions include thyroiditis, hypothyroidism, B12 deficiency, and gangliosidosis. Substances that can trigger a psychotic episode include metronidazole and addictive substances including LSD, PCP and ecstasy.

There is scant evidence for a biological basis to PND. Although the presence of the 'baby blues' have been found in a number of studies to be related to the possible subsequent development of PND, and this association is indeed consistent with hormonal aetiological factors, the basis of the association remains obscure (Cooper et al 1998). Gynecological and obstetric factors have been implicated as potential risk factors in some reports but not in others. Two studies have found an interesting interaction that suggests that obstetric factors may be relevant in a more vulnerable subgroup of women. Murray and Cartwright (2003) found that it was only among those with a previous history of depressive disorder that delivery complications were associated with PND. O'Hara and colleagues (2001) found that the combination of depression during pregnancy and higher level of obstetric stressors was a significant risk factor for post-natal depression.

The consistent finding of the epidemiological studies carried out to date is that the major factors of aetiological importance are primarily of a social nature. This may include the occurrence of stressful life events, unemployment and subsequent

financial anxieties, the presence of marital conflict and the general absence of personal support from partner, immediate family and friends.

2.12 The Changing Role of the Family Network

This section aims to look at literature associated with the changing role of the family network. An Australian longitudinal study (Haslam et al 2006) found that women whose parents provided social support, and who had high levels of self-efficacy, had lower levels of PND. This study included 247 pregnant and post-partum women. Mothers were assessed in their last trimester and at four weeks following delivery. Contrary to prediction, partner support did not influence levels of PND. The authors hypothesized that it was likely that support from the women's own parents increased their sense of competence in caring for their new babies. In addition, support from parents may have been more specific than partner support to the needs of new mothers. Few researchers have studied the effect of parental conflict and loss on the likelihood of PND. However, Kumar and Robinson (1984) found that a poor relationship with the women's own mother was associated with post-partum depression. Gotlib et al (1991) found that more negative perceptions, measured during pregnancy, of both maternal and paternal caring during childhood, were actually associated with a diagnosis of PND. Adversely, Paykel et al (1999) found no association between either parental conflict or childhood parental loss and postpartum depression.

Interestingly, Stern and Kruckman (1983), in their classic paper, found that depression, or even post-partum 'blues', are virtually non-existent in many diverse cultures around the world. Although these cultures differed dramatically from one another, they did have some common elements. Primarily a strong social support structure was paramount, families nestled in close communities and 'fellow' mothers with small children were on hand to give advice and guidance. The post-partum period was recognised as a time that is distinct from normal life. The mothers are given time to recuperate, their activities are limited and they are taken

care of by female relatives. In the Punjab, women are secluded from everyone but close female relatives and a midwife for at least five days post-partum.

In some cultures seclusion can last up to three months. It is considered to be a time for rest and to provide a bonding period between the mother and her new baby (strongly included within this is the opportunity to establish breastfeeding). In the colonial period in the U.S, women often returned to their parent's homes to ensure that the required amount of assistance is on hand. This may be considered extreme within the Western world. Mothers are commonly expected to simply 'bond' with their infant and in many respects, simply 'cope' and return to normal existence as quickly as possible (Weissman et al 2006).

In a rather innovative study of its time in South Africa, Wolman et al (1993) evaluated the efficacy of providing companionship during labour to a group of women who had no companions of their own. The authors correctly reasoned that childbirth was a time when women were particularly vulnerable and may be more exposed to losing their confidence in their competence as a parent. They believed that the loss of confidence may be a causal factor towards the development of PND. The provision of support during the difficult process of labour was hypothesised to increase a women's confidence in their competence thus reducing depressive and anxious symptoms during the post-natal period.

2.13 The Psychological Risk Factors Associated with PND

The research cited above refers to general depression but attributional style has also been studied in relation to depression in new mothers. An Australian study of 65 primiparous women found that dysfunctional attitudes were in fact closely related to depression at six weeks postnatal. This was especially true for the group of women with high amounts of post-natal stress or whose babies had unsettled temperaments (Grazioli and Terry 2000). Negative thinking and irrational thoughts of death and dying at one month post-natally predicted depression at four months

in another study of 465 post-natal mothers (Chaudron et al 2001). The authors considered thoughts of dying as a possible indicator towards developing depression. Interestingly, although women who were breast feeding their babies did not differ from women who were formula feeding in the development of depression, the mothers who were worried about breast feeding were significantly more likely to become depressed than those who were not concerned.

Collins et al (1993) found that optimism was found to influence birth outcomes in a medically high-risk sample of 129 women. In this particular study, prenatal stress and optimism were examined in relation to birth outcomes (measured using birth weight and gestational age), controlling for risk and ethnicity. Women who were less optimistic had infants who weighed significantly less even after controlling for gestational age. Prenatal stress did not have an effect once optimism was included within the model. Of course some of these differences could be attributed to behaviour – optimists who were more likely to exercise, and exercise lowered the risk of a pre-term baby.

As mentioned earlier, self-esteem, self-efficacy and expectations are three concepts that relate to a woman's adjustment to her new role as a mother, what her expectations of herself are and how 'in control' she feels. These concepts are closely related and tend to interact. Beck (2001) found that, in a meta-analysis of 84 studies, self-esteem had only a moderate effect on depression. However, Chaudron et al (2001) reported that low self-esteem at one month predicted post-partum depression at four months. A prospective study of 191 low income, inner-city women found that low self-esteem was related to lower levels of depression in both the antenatal and postnatal period (Ritter et al 2000).

Another key factor can be the experience of a difficult and traumatic birth (Veddovi et al 2001). This includes emergency caesarean sections. The anxiety, humiliation and the feeling of failure that are often felt when a birth has 'gone

wrong' can leave a mother too exhausted and upset to initiate the first steps of getting to bond and familiarise herself with her new infant. In some instances the mother may feel angry with her baby as though it is their fault that she was unduly 'cheated' of the birth that she had planned for (Kendall-Tackett 2010).

Previous miscarriages, stillbirths and, of course, cot deaths will all have a devastating effect. It is certainly easy to see how all of these emotions, if unrecognised and untreated may lead to severe depression. Kendall-Tackett (2010) describes such deliveries as 'negative birth experiences'. She explains that many of these experiences may lead to post-natal depression without necessarily producing psychological trauma. Simkin (1992) documented that women accurately remember vivid details of their births fifteen to twenty years later. Unsurprisingly, birth experiences have a long lasting effect on how women feel about themselves as both women and mothers. Simkin suggests that women who have experienced a positive birthing experience felt that they had achieved and accomplished something very important, that they were in control, and that giving birth had significantly contributed to their sense of self-esteem and self-confidence. Women whose birthing experiences were not satisfying or indeed traumatic felt undermined, devastated, out of control and could often vividly recall every negative aspect of their situation. They recalled feeling as if they were not invited to participate in any decision making, had insufficient information, a high and perhaps unnecessary degree of intervention and the women perceived that their caregivers were most unhelpful and often intimidating.

Astbury et al (1994) found that follow-up for a mother who has experienced a traumatic delivery is helpful. A debriefing session with a qualified midwife encourages the mother to talk about their deliveries and allows them to ask questions and discuss their feelings of sadness, guilt and anger or confusion. Lavender and Walkinshaw (1998), in their randomised trial, allocated mothers to a debriefing or to a standard care condition. Debriefing was provided by midwives

that included listening, support, counselling and explanation of treatment and why procedures were carried out and intervention required. At three weeks post-partum, those mothers who received intervention were significantly less likely to be anxious or low in mood than the control group.

A review of midwife-led debriefing found that the evidence was insufficient as to the effectiveness of the debriefing process - that actually the session had little, if any, positive effective on the mother's state of mind/mood (Gamble et al 2002). The methodological issues Gamble and colleagues raised included a lack of standardised debriefing intervention, a lack of comprehensive outcome variables including the non-inclusion of trauma symptoms, and a distinct lack of inclusion of the women's partner in the de-briefing session. The authors concluded that a single intervention session would be insufficient to deal with the numerous issues raised. However, they did acknowledge that there may have been some benefit to the mothers of being able to discuss and reflect with an individual about their birthing experiences.

However, mothers who had been most traumatised by their births may potentially have been so distressed from the experience that they may just want to return to normality as soon as possible and, therefore, any immediate intervention may be a completely pointless experience (Gamble et al 2002).

Astbury et al (1994) discussed how women may re-evaluate their births after the initial danger has passed, and the crisis of the first few months has resolved somewhat. This may be more relevant in the case of a delivery where there had been a considerable amount of intervention - the initial reaction may simply be an overwhelming relief to actually have survived the experience. Only at a later period, on reflection, may women allow their thought process to question and relive the actual delivery. This will, of course, create a delayed response and the birth may be viewed even more negatively.

This possible explanation is supported by Simkin (1992). She explored the nature of memory changes over a period of time. Simkin (1992) noted that there is often a 'halo effect' that occurs after birth where women will 'gloss over' the negative experiences in their initial euphoria. As time passes, the halo fades and aspects of their deliveries are looked at more realistically. Simkin (1992) suggests that because of this initial delay, professionals are often blithely unaware of the underlying emotions being harbored.

Many care providers do not realise that women are often traumatised by their births and, if untreated, these emotions can last a lifetime with disastrous implications for the entire family. Women who have had a difficult birth must acknowledge their trauma if they are ever to move beyond it. Trying to forget is not an effective strategy, and trauma that is ignored and dealt with can manifest itself in a variety of destructive and negative behaviours. Women who have not processed their birthing experience manifest symptoms such as postnatal depression and an inability to empathise with others (including their own children), helplessness, self-destructive behaviour, somatic complaints, sexual dysfunction, marital difficulties, anger and hostility (Reay et al 2006). By working through their trauma, women acknowledge and allow themselves to feel anger and disappointment about the event that has occurred. Reay (2006) suggests that as trauma and grief are reclaimed, she can give meaning to the event and progress forward. In time, she may even value her experiences and attempt to do something to help others in a similar situation.

This again supports the intervention of a peer worker within the early days postnatally as this may indeed allow the mother to discuss her delivery freely with a non-medical practitioner. She may, by talking through her experiences, allow herself to gain some closure and thus move on from a potentially damaging experience. The PSW may provide a secure environment in which the mother has

protected time with a fellow mother to ‘debrief’ the labour experience and perhaps discuss any concerns or issues that may be relevant.

2.14 Mediating Mechanisms Associated with PND

A number of mechanisms may mediate the association between the occurrence of PND and adverse infant outcome. The most direct environmental route to be considered is the child’s exposure to the mother’s depressive symptoms. It is most certainly the case that, in the study of Lyons-Ruth and colleagues, infant outcomes in terms of both cognitive development and attachment security were more compromised in the context of severe, rather than mild, maternal depression (O’Hara et al 1991). Campbell et al (1984) found poor infant behaviour to occur in the context of interactions with the mother where the mother was chronically, but not more briefly, depressed. Stein et al (1991) found poor infant behaviour at 19 months of age in cases where the mother had been depressed postnatally, whether or not she had recovered by the time of the infant assessment.

Similarly, Murray (1991), found the insecure attachment, behaviour problems, and poorer cognitive outcome, associated with the occurrence of postnatal depression, in infants of 18 months even though, in the majority of cases, the depression had remitted by around six to eight months post-partum. In this particular study, moreover, there was no association between infant outcome and the severity of the mother’s post-natal depressive episode.

The second causal route is via parenting difficulties associated with the occurrence of maternal depression. It is well established that depression is associated with a range of persistent difficulties in interpersonal functioning. Weissman and Paykel (1974) described, for example, how women who had experienced depression, but remitted, continued to display raised levels of irritability or withdrawn behaviour in the context of their close family relationships. They suggest that this may be because experiencing postnatal depression sets in train a pattern of relating to the

infant that remains compromised in the longer term, in spite of the relatively brief duration of the initial episode.

Support for this hypothesis comes from the study of Stein et al (1991), who found the quality of maternal interactions with the infant to differ between well control group mothers who had recovered from depression by the time of the actual assessment. The third possible causal route is via third factor variables, environmental adversity, as noted by Cooper and Murray (1997), postnatal depression often occurs in the context of social and personal adversity.

In a number of studies focusing upon the interaction between mother and infant, Murray (1992, 1997 and 1999) has suggested that post-partum depression may lead to mothers being inconsistent with childcare – focusing more on the negative events of childcare and resulting in poor coping strategies. Mothers with depression can unconsciously exhibit fewer positive emotions and indeed more negative emotions towards their children. They may be less responsive and less sensitive to infant cues, less emotionally available, have a less successful maternal role attainment thus resulting in their infant being less securely attached – in more extreme cases, some women have harmed or had serious thoughts about harming their children (Beck 1995, Coghill et al 1986, Murray and Cooper 1997).

2.15 Antenatal screening

Murray strongly concludes that early intervention is of vast importance. Early identification and intervention improves long term prognoses for the majority of women (Beck 1995, Maughan et al 2007, Almeida et al 2009). In addition there have been some successes with pre-emptive treatment. A major part of prevention is being informed about the risk factors. Almeida et al (2009) suggests that women should ideally be screened during pregnancy to determine their risk for acquiring postnatal depression, and if an elevated score is attained then preventative measures should be explored.

Cooper et al (2014) studied an attempt to prevent postnatal depression by targeting the mother-infant relationship. The purpose of the study was to investigate whether providing an intervention which focused on enhancing the quality of the mother-infant relationship would prevent the development of PND and the associated impairments in parenting and adverse effects on child development. The mothers were targeted in the antenatal period. The study revealed that the intervention had no impact on maternal mood, the quality of parenting behaviors, or infant outcome and therefore cannot be recommended in the prevention of PND and its associated problems.

There has been a great deal of recent interest in whether mothers in the antenatal period need to be assessed for depression which subsequently continues into postnatal depression - whether early targeting and intervention antenatally may prevent the progression towards depression postnatally. Meijer et al (2014) investigated whether the ten-item EPDS administered antenatally may accurately predict postnatal depression. They also looked at whether a two-item EPDS may have similar predictive accuracy.

The study concluded that women who did develop postpartum depressive symptoms had statistically higher antenatal EPDS scores. However, the ten-item EPDS was much more accurate than the two-item. The two-item demonstrated a very poor predictive performance. These results support the earlier studies carried out by O'Hara et al (1996), Lancaster et al (2010) and Kim et al (2008). Screening in the antenatal period does appear to be a positive predictor for the development of postpartum depression but cost and time implications will be substantial. It may be beneficial to assess and monitor women antenatally who have a history (or family history) of depressive illness initially.

2.16 The Edinburgh Postnatal Depression Scale (EPDS)

The EPDS was used as a tool within the study to assist in the diagnosis of PND. The EPDS is used as standard practice within the NHS Trust Directorate that the study was undertaken. As the Health Visitors who were recruited to assist with the study were employed within this Directorate then it was specified that this was the tool that needed to be utilised. Within this chapter there will be a discussion about other screening tools that may have been potentially used for screening purposes.

The EPDS was routinely administered to each participant within both the control and intervention group at 6 weeks, 12 weeks and 26 weeks. As is normal practice, the questionnaire was given by the Health Visitor at 6 and 12 weeks alongside a clinical assessment within the participant's own home. The lead researcher (also a trained Health Visitor) administered the EPDS at 26 weeks alongside a face to face interview, again within the participant's own home.

The EPDS was developed by Cox et al in 1987. Cox identified that screening scales for depression appeared to have a number of limitations when used on childbearing women. The possible explanation for apparent limitations of the well-established scales when used on childbearing women included their emphasis on the somatic symptoms of psychiatric disorder which may be caused by normal physiological changes associated with childbearing, in addition to the reluctance of community staff to utilise questionnaires which may be regarded as time-consuming or which appeared to lack face validity (Cox et al 1987). Cox decided that, if a screening test was to be useful for helping to recognise depression following childbirth then it must be fully acceptable to women who actually may not recognise themselves as unwell, or in need of any medical intervention. The scale needed to be comprehensible, fast, and simple to complete. He also recognised that it needed to be appropriate for health workers who did not have any specialist knowledge of psychiatry. The scale required satisfactory reliability and validity.

In addition to this, Williams et al (1980) had appropriately emphasised that rating scales which had been originally validated on hospital samples must be revalidated if they were to be used within a community setting where the differences between psychiatric illness and normality is often less distinct or recognised. The earlier work of Snaith (1985) was also relevant as he clearly acknowledged the need to adapt existing scales of depression for use in new specific clinical situations and in particular was aware of the need to develop a screening questionnaire to specifically detect PND.

Cox et al carried out a detailed analysis of the suitability of the Irritability. Depression and Anxiety Scale (IDA) (Snaith et al 1994), the Hospital Anxiety and Depression Scale (HAD) (Snaith et al 1985) and the Anxiety and Depression Scale of Bedford and Foulds (1978). Twenty one items were selected, including several of their own which were thought to be appropriate for the assistance in the diagnosis and detection of PND. These items were then subsequently tested rigorously during extensive pilot studies with mothers of young infants.

The detailed wording of items, their acceptability to mothers and health workers, in addition to their perceived likelihood of detecting PND was then carefully evaluated. Thirteen items were eventually selected as being those most likely to accurately detect PND, seven were constructed by Cox and his research team and the remaining six were adapted from the IDA and the HAD.

The validity of this 13-item scale was then established on a sample of 63 postnatal women who attended a health centre in Livingston, near Edinburgh. This study showed that these 13 items clearly distinguished between depressed and non-depressed women, although a rotated factor analysis revealed that the two items from the irritability sub-scale of the IDA, together with an item concerning the enjoyment of motherhood, formed a separate ‘non-depression’ factor. This latter

finding providing confirmation of Snaith's earlier observation that irritability was often identified as a separate mood from depression and anxiety.

As this analysis of the data had suggested that the specificity of the scale might be increased by omitting these specific three items, it was decided to carry out a further validation study using only the 10 items which were more clearly related to depression. In addition, the 10 item scale would take less time to complete.

The validation study was carried out on a further 84 mothers living in Edinburgh or at Livingstone New Town. Many of the mothers, who were taking part in a study to determine the effectiveness of counselling by Health Visitors in the treatment of PND, had been identified by their Health Visitors at approximately six weeks post-delivery as being potentially low in mood. The Health visitors had been asked to indicate whether, in their professional opinion; these mothers were 'normal', 'low in mood' or 'having problems'.

Cox envisaged that a useful function of the scale would be to confirm the diagnosis of depression in women already suspected by their Health visitor as being depressed. He also considered the importance of determining whether the scale would satisfactorily identify PND if it was administered in a home environment. The mother's home was therefore an optimum venue in which to validate the 10-item scale. At this home visit the EPDS was initially completed by the mother and then placed in a sealed envelope so that the interviewer remained unaware of the score when administering the Standardised Psychiatric Interview (SPI) (Goldberg et al 1970).

To prevent any potentially bias effect caused by the interviewer knowing that the subject may have been assessed by the Health Visitor as being 'depressed' or 'having problems', 12 'well' mothers were included in the sample. The mean age of the mothers selected was 26 years, and that of their babies was three months.

Seventy five percent had had normal deliveries, 15% Caesarean Sections and a further 10% had forceps deliveries.

The study concluded that the 10-item Postnatal Depression Scale, derived from the earlier work of Snaith, had satisfactory validity, split-half reliability and was also sensitive to changes in the severity of depression over time. The scale was fully acceptable to the mothers and was completed, on average, within five minutes – which was recognised as a huge benefit as time is often so restricted (Cox et al 1987). The simple method of scoring was deemed an advantage and the Health visitors acknowledged that the scale would greatly assist them in the early detection of mothers who were depressed post-partum.

The data suggested that women who scored above a threshold of 12 were most likely to be suffering from a depressive illness of varying severity, and this would indicate the requirement for a further assessment by a Primary Care Worker to ascertain whether or not clinical depression is indicative. However, as discussed within this study, a cut off score of 11 was used for the purpose of this particular study.

The EPDS is not a substitute for clinical assessment, and a score just below the cut off of 12 should not be taken to indicate an absence of depression, in particular if the Healthcare Professional has other reasons to consider this diagnosis (Morrell et al 2000). A high score is not synonymous with clinical depression and a low score does not rule depression out (Henshaw et al 2005). Cox even suggested that the data may indicate a threshold of 9/10 if the scale was considered for routine use by Community Staff.

The EPDS is reliably used worldwide and routinely carried out at the six week postnatal review, ideally within the home environment (Cox et al 1994). It is performed by the mothers own Health Visitor and, as previously stated, is an

assessment tool utilised alongside a clinical interview. The EPDS should not override a clinical judgement but be utilised in conjunction with (Cox et al 2014). The scale indicates how the mother felt during the previous seven days and may require repetition within ten to fourteen days if diagnosis is uncertain (Henshaw et al 2005). It has been selected to be utilised within this study as it is, as stated previously, routinely administered as standard practice at six weeks postnatally to all mothers within the local NHS Trust Directorate.

2.17 Criticisms of the EPDS

As with any screening tool there are a number of issues that have been raised regarding the validity and reliability of the EPDS.

Poole et al (2006) studied the views of women being screened for PND. Although views were generally positive regarding the use of the EPDS there were a number of issues that raised some concern. The main concerns appeared to be the lack of information imparted to mothers about the screening tool prior to implementation, and the stigma that participants felt was still attached to being identified as having PND. This may be the same for any screening tool so could be considered unspecific to the EPDS – however the paper was targeting the use of the Edinburgh. Buist et al (2006) studied the acceptability of the EPDS for postnatal depression and their results demonstrated an 85% acceptability rate. Discomfort with screening was significantly related to having a higher EPDS score. Mothers felt that the acceptance depended on how the professional explained the EPDS – if it was clearly explained and discussed prior to administration then their anxiety levels were greatly reduced. Santos et al (2007) found that a potential source of criticism for the EPDS was the time that it was conducted (six weeks post-delivery). The indication being that the screening was carried out at too late a stage. However there is an incomplete knowledge regarding the natural history of PND. The Diagnostic and Statistical Manual of Mental Disorders state that PND has its onset within four weeks post-partum, others define onset up to three months post-

partum and some studies state that onset can appear up to twelve months post-delivery (Cooper et al 2003, Munoz et al 2000, Harpham et al 2003). Therefore the ideal timeframe for screening has not yet been established and further studies are required to specify a time frame.

Matthey et al (2012) reported in their study, that the EPDS produced high rates of false positives and that it did not distinguish women with anxiety from women with depression. The investigators suggested that future research is required to pinpoint a specific screening tool for anxiety disorders.

Stewart et al (2004) stated that mothers could, easily, be untruthful when answering the questions but as the tool was administered alongside a clinical assessment then, ideally, the EPDS was only part of the full picture used by the professional. He did state that it should be administered by an appropriately trained practitioner – for the purpose of this study all EPDS's were carried out by trained Health Visitors.

Dennis (2005) reported that the EPDS was accepted worldwide but is not a substitute for, or equivalent to, a clinical diagnosis – and must always be used alongside such.

2.18 Depression Screening Tools

Clearly practitioners must have confidence that the tools accurately identify depression among the mothers in their practices. However, as indicated earlier, practitioners must be trained in the effective delivery of any screening tool and participants should be fully informed as to why it is being utilised and potential implications from results obtained.

Several studies assessed the accuracy of screening tools in identifying postpartum depression but they had a number of limitations (Gaynes et al 2005). Most did not

include significant numbers of low-income or minority women – who may have higher rates of postpartum depression. In addition, a number of the studies only assessed the tools' accuracy in the early postpartum period. As postpartum depression can occur at any time in the first two years then this may not be a reliable assessment (Chaudron et al 2006).

Apart from the EPDS, the Beck Depression Inventory 11 (BDI-11) has been successfully used to assess cognitive, behavioral, affective and somatic symptoms of depression (Beck et al 1988). Suggestive cut-offs are scores ranging from 0-13 for minimal depression, 14-19, mild depression, 20-28 moderate depression and 29-63 more severe depression. However, questions used within the Beck Inventory are more generic than the specific postnatal questions used in the EPDS.

The Postpartum Depression Screening Scale (PDSS) (Beck et al 2000) is another tool that may have been potentially used for the purpose of this study. This is a 35-item; self-report questionnaire that assesses seven dimensions (sleep, anxiety, eating disturbances, cognitive impairment, loss of self, guilt and contemplation of self-harm). Scores range from 35 to 175. However, there are cost implications with the PDSS and it is a time consuming questionnaire – as time is often restricted this may be viewed as an unrealistic option (Boyd et al 2005).

Chaudron et al (2010) found that both of the screening tools cited above were equally accurate in identifying depression in the initial postpartum year. The tools' performance did show some minor variability at different time points but the differences did reach a level of statistical significance. Chaudrons' findings do suggest that practitioners can be confident when using the tools within the first year postpartum. These findings are similar to those of a study conducted in Pittsburgh where a number of tools were used – including the EPDS – and significant differences were not found in the accuracy of diagnosis (Hanusa et al 2008).

As a number of the instruments commonly used to assess mothers postpartum appear to have equal reliability and validity, providers need to consider the advantages and disadvantages of each tool. Each has its own merits and all of the information available about each instrument needs to be taken into consideration when selecting the right tool for their particular client base.

2.19 The Benefits of Exercise.

Further recent studies have explored the option of the effectiveness of exercise for both the prevention and treatment of antenatal and postnatal depression (Pearlstein 2015, Field et al 2013, Mitchell et al 2012, Fatemeh et al 2014, Lewis et al 2013). Daley concluded that exercise as a treatment for antenatal depression was potentially a positive factor but the trial did not report a significant difference between exercise and the usual interventions used for postnatal depression. Fatemeh et al (2014) introduced a home-based exercise intervention to women diagnosed with postnatal depression but the results did not show any significant difference or evidence to show any preventive or treatment effect on postnatal depression. However, Haruna et al (2013) found a significant improvement in the psychological well-being of an exercise programme for postnatal mothers – this trial did not focus specifically on mothers with postnatal depression but simply mothers in general postnatally. The study did report that the exercise intervention did not produce any significant changes in the EPDS scores recorded.

Studies within this field are limited. Further research is required to determine the effectiveness of exercise as an intervention as well as to examine the possible link between sedentary behaviour and postnatal depressive illness.

2.20 NICE Guidelines (2015)

NICE have recently updated their antenatal and postnatal mental health guidelines (2015) and have made a number of positive recommendations. It has been suggested that all women of childbearing age, who have an existing or past mental

health problem, are asked about any plans for pregnancy and are informed as to how pregnancy and childbirth may affect a mental health issue – including the risk of relapse. NICE have recommended that all women should be asked a number of targeted questions about their mental health on their initial booking appointment with their midwife – thus recognising potential problems early and signposting to relevant agencies. These questions should be repeated regularly both during the antenatal period and in the first year post delivery.

If a woman is considered to be ‘at risk’ of a mental health issue then an integrated care plan should be established providing the interventions required and agreeing the outcomes.

Women should be fully informed prior to conception, antenatally and postnatally, about the possible risks of mental health problems, the benefits and risks of treatment and the potential harm if treatment is not accessed.

Care has also been recommended for women who experience a traumatic birth, miscarriage or still birth. Follow up care for these women should be coordinated by an experienced healthcare professional and have a structured approach.

These recommendations may be viewed as a positive step in the recognition of maternal mental health. The guidelines emphasise recognition of mental health problems during both the antenatal and postnatal periods. It also emphasises the need to include anxiety disorders as well as depression. It is hoped that improved recognition will come from staff training and revision of routine care pathways – thus providing prompt access to further assessment, including that by specialist perinatal mental health services.

The guidelines recommend a raised threshold for using psychotropic drugs for some disorders and more emphasis on providing psychological therapies – antenatally and postnatally (Howard et al 2015).

These guidelines positively promote both early recognition, intervention and the use of psychological treatments – as utilised within this study.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter will discuss the process of designing and undertaking research and collecting and analysing data. It will begin with an overview of the rationale for using a mixed methods approach for collecting data. There will be a discussion about interviews and the rationale behind using the semi-structured approach. The interviewer effect will be explored. The method for obtaining the sample for the study will be explained, an experimental approach will be analysed. The chapter will conclude with a discussion about the ethical implications arising from the research and the responsibilities incumbent upon the researcher when undertaking this study.

3.2 Research Design - Mixed Methods Approach to Research Study

The term mixed methods applies to research that combines alternative approaches within a single research project (Denscombe 2008). At its simplest, a mixed methods strategy is one that uses both qualitative and quantitative methods – as used within this study. The identification of the mixed methods approach is relatively new. As an approach, with a recognised name and credibility, it has only really come to the fore in recent times – championed by researchers such as Creswell (2003), Gorard and Taylor (2004) and Tashakkori et al (1998, 2003).

The mixed methods approach has three characteristic features that set it apart from other strategies for social research. It may be useful to summarise these prior to explaining the rationale behind using this approach for this study. At the centre of the approach is the idea that researchers can bring together within a single project certain elements that may have conventionally been treated as an 'either/or' option. In many cases the distinction is drawn between 'qualitative' and 'quantitative' methods, data or research. The mixed method approach emphasises

the need to explain why the alternative approaches are beneficial and how they can be brought together.

3.3 Pragmatism and the Mixed Methods Approach

Pragmatism is often regarded as the philosophical 'partner' for the mixed methods approach (Tashakkori and Teddlie 2003). The underlying philosophical framework selected for this study is pragmatism. Pragmatism tends to revolve around the fact that knowledge is based on practical outcomes and what really works – an emphasis is based upon practical approaches to research problems. As suggested by Denscombe (2008) the key criterion for assessing knowledge is how useful it is perceived to be and how well it works when applied to a practical problem. Pragmatism also suggests that research should 'test' what works through empirical enquiry, it involves actually getting out there and purposefully seeking the necessary information required.

Putnam (1995) proposed pragmatism as the 'experimental theory of knowledge' where all knowledge is seen as provisional and is judged in terms of how useful it is for the knowing subjects. For pragmatists, knowledge exists in the form of statements or theories which are best seen as instruments or tools, coping mechanisms, not 'once and for all-time truths'. Rorty (1981) describes knowledge in the pragmatist sense, as a web or network of statements, and the value of any form of knowledge is its usefulness and applicability which may be constrained in terms of time and place and user.

Knowledge is provisional within the field of pragmatism, what we may understand as the truth today may not be categorically seen as this in the future. Tashakkori and Teddlie (2003) suggest that knowledge is seen as a product of our time and that it can never be totally perfect or absolute because it is invariably a product of the historical era and the cultural context within which it has been created.

Pragmatism represents an advance in thinking about social research – a relatively new paradigm, a 'what really works best' is the guiding principle. Mixed methods research, as within this study, adopts a pragmatist position that allows it to bring together different methods drawn from paradigms of research that may have been conventionally regarded as incompatible or unsuitable.

3.4 Disadvantages of the Mixed Method Approach

There are, of course, disadvantages with any form of methodology (Denscombe 2008). Within the mixed methods approach, the researcher needs to develop skills and knowledge about more than one method. Indeed, there needed to be a sound knowledge basis covering both quantitative and qualitative approaches within this study. This can also be an extremely time consuming, and often costly, factor.

Denscombe (2008) describes the underlying philosophy of the mixed methods approach – pragmatism – as something which can be open to misinterpretation. He explains that there is a common-sense use of the word pragmatic which implies expediency and a lack of principles underlying a course of action. The mixed method approach can therefore become associated with the understanding of this word and is in danger of becoming regarded as an approach in which 'anything goes' (Coxon 2005). Denscombe emphasises that this is not the philosophical meaning of pragmatism and is certainly not a meaning that should be associated with a mixed methods approach at all.

There is also the potential problem which may arise in which findings from the different methods do not corroborate with one another. In particular, when the mixed methods approach is being used to check the validity of findings any disparity between the findings can pose a challenging and difficult occurrence. To a large degree, the mixed methods approach operates on the assumption that findings will in fact coincide and that this will be a positive contribution to the research study. If this does not occur and the findings do not coincide then the

researcher can be faced with a problem. In principle, this should not be an issue as it should simply encourage the need for further research to investigate the difference in the findings. The contradictions may indeed be very interesting and thought provoking. However, in practice non-corroboration does have negative consequences and can place extreme time pressures on researchers and their studies. At the end of their project the researcher can be left with contradictory findings from the alternative methods or data sources – and subsequently, no firm conclusion or outcome.

Academics often look to research to provide concrete findings or solutions to pressing problems and an unsatisfactory result, with conflicting data from different methods, is understandably deemed unacceptable and frustrating. Funders, peers and examiners may feel dissatisfied that the completion of the study does not provide a 'clear-cut finding' (Hammersley 1992). There might even be the interpretation that, perhaps, an incorrect methodology had been employed within the project. This statement is purely from a reflective perspective and was not apparent within this study.

3.5 Experimental Approach

An experimental approach was selected for the study. To summarise, an experiment is an empirical investigation under controlled conditions and is designed to examine the properties of, and relationship between, specific factors (Tesch 1993). Briefly, there are three key elements that lie at the heart of an experimental approach.

These are:

- The identification of causal factors – the introduction or exclusion of factors to or from the situation enables the Researcher to accurately pinpoint which factor causes the observed outcome to occur.

- Controls – experiments involve the manipulation of key variables and the Researcher needs to identify factors that are significant and then either introduce them to or exclude them from the required situation to enable an effect to be observed.
- Empirical observation and measurement – experiments rely on detailed empirical observation of changes that occur following an introduction of a potentially relevant factor. An experiment also involves the exact measurement of the changes that are observed.

The decision to use an experiment was a strategic one in which the researcher could investigate the introduction of a Peer Support Worker under controlled conditions – paying careful attention to the meticulous measurement of what occurs. As suggested by Silverman (2006), experiments are generally concerned with determining the cause of any change that occurs to the topic being studied. Experiments usually aim to discover which of the factors the cause is. This requires a distinction between independent and dependent variables. The independent variable has the impact on the dependent variable. As explained by Silverman (2006), the size, structure, volume or whatever exists autonomously owes nothing to the other variable. A change in the independent variable will affect the dependent variable. The dependent variable is the factor that alters as a result of a change to the independent variable. It actually does depend on the independent variable. This point will be returned to later.

When conducting an experiment the aim is to show that the dependent factor (for example in this study, the severity/longevity of PND) responds to changes in the independent factor (the introduction and support from a Peer Worker). To do this, the researcher needs to be as certain as possible that it was the support from a PSW that was responsible for the outcome of the study and not some other factor. There are a number of ways in which experiments can be designed to achieve this- each of which involves the use of controls.

The most straightforward way to isolate the impact of a variable, as described by Tesch (1993), is to introduce it while keeping all other relevant factors unchanged. Therefore, it is possible to pinpoint the impact of the new factor and to deduce that any observed changes that may occur are attributed to the new factor. This can be proven if the only thing that has changed is the introduction of the new factor. This can be difficult to achieve as it may be problematic to ensure that absolutely none of the other variables alter. Secondly, variables are often linked so that a change in one variable may cause changes across a range of other variables.

Both quantitative methods (the scoring of the Edinburgh Postnatal Depression Scale) and qualitative (the log book recordings, notes from supervisory sessions, and use of interviews) were used for this study. It is intended that, by using more than one method the findings of this study will be enhanced - providing a fuller picture of postnatal depression and its potentially devastating effects. The data provided in this particular instance was complementary and provided an alternative perspective – a complete overview of the study. If only a quantitative method had been used then the rich and detailed data, the very different personalities of the mothers and their vivid descriptions of their immense feelings and emotions would not have been recognised or achieved. Qualitative analysis opens up the opportunity of the validity of more than one explanation (Denscombe 2008).

Qualitative data provides the researcher with a strong handle on what real life and experiences are truly like (Miles and Huberman 1994). This is particularly important in relation to this study as it was imperative to really try to understand the sufferer's feelings and emotions. By using both a quantitative and qualitative approach and by facilitating a blend of exploratory and explanatory research, the findings are more likely to address a wider range of questions relating to 'how', 'why', 'what', 'who', 'when' and 'how many' (Denscombe 2008).

Recognising that different methods have their own respective strengths and weaknesses, one of the most valuable uses of mixing methods is to offset any inherent weakness or bias in one particular method by combining it with another method. As suggested by Denzin (1989), the combination of multiple observers (the mothers and the PSW's), theories, methods and data sources, Researchers can hope to overcome the potential intrinsic bias that comes from single methods, single observer and single theory studies. A combination of methods allows the researcher to exploit the strengths of one particular method without leaving him/her vulnerable to criticism in connection with that method's weakness. By selecting, as in this particular dissertation, to use semi-structured interviews as one of the data collection methods, the researcher is able to attempt to gain an in-depth understanding and insight in to a particular group of people (the postnatal mothers suffering from postnatal depression).

3.6 A Summary of the Study

This study will be classed as an 'early intervention' pilot study. The aim of the study was to, ideally, place an effective support strategy in at the earliest opportunity. The main outcome hoping to be achieved was the reduction in the longevity/severity of postnatal depression.

The mothers were recruited by their own Health Visitor. This was carried out using the Edinburgh Postnatal Depression Scoring documentation (EPDS) alongside a clinical assessment – both of which are routinely undertaken by the family Health Visitor. This is standard practice when the baby is six weeks old within the primary healthcare trust that was used for the purpose of this study. Fully informed consent was then obtained from all mothers and participant information sheets were given. There was the opportunity to ask any questions or seek any further guidance. The telephone number for the lead researcher was also given if the prospective participant's had any further queries or concerns at all.

Three mothers did indeed contact the lead researcher and their queries were answered.

Thirty mothers were recruited by the three practices involved within the study, they were recruited over a period of approximately ten weeks by the four HV's (two of the HV's involved in the study were employed within the same practice but managed different case-loads). All of the participants were first time mothers, aged between 25 years and 35 years. Their first language was English. Each participant had been/was employed within some capacity prior to having their baby and had some level of higher education after leaving school (College of Further/Higher Education or University). They had no previous experiences of any mental health issues and had unremarkable obstetric histories. Mothers with a previous history/family history of any mental health issue, miscarriage or still birth were excluded from the study. The three medical practices were all based within similar areas – more rural than urban but with relatively small pockets of deprivation. Each had a comparable sized population and an analogous percentage of ethnic minorities.

By a method of number alternating the mothers were allocated in to either an Intervention group or a Control group. This had been fully explained to the mother's during the recruitment process but a small number of those allocated to the control group did complain to their own HV that they really did 'need a Peer Support Worker!' One participant, when contacted by the lead researcher to affirm which group they had been allocated, did request a 'move to the other group' but it was explained, again, how the process was carried out and the mother was suitably calmed. The EPDS score needed to be 12 or greater, as is standard protocol, the EPDS is only an assessment tool and is always supported with a full clinical assessment (Cox et al 1987). Two mothers did score below the cut-off point by achieving a total of 11 points. However, it was decided following a clinical evaluation by their HV that they should be offered the opportunity to be included

within the trial. The range of scores was 11-17 points with three mothers scoring 16 and 17 points. One mother scored 19 points but was referred via her General Practitioner to the Mother and Baby Unit for a more intensive support programme. A copy of the EPDS and scoring criteria is included in the Appendices.

The process for the collection of both qualitative and quantitative data is summarised in Table Two below.

TABLE 2 Process for the Collection of Data

Intervention Group.	Control Group.
Baseline Edinburgh Postnatal Depression Score (EPDS) / clinical assessment by Health Visitor (HV)	Baseline EPDS / clinical assessment by HV
Six weekly visits by Peer Support Worker (PSW) and Health Visitor (at separate intervals)	Six weekly visits by HV only
Repeat EPDS / clinical assessment by HV on completion of six visits	Repeat EPDS / clinical assessment by HV on completion of six visits
EPDS / interview at six months by Lead Researcher	EPDS / interview at six months by Lead Researcher

3.7 A Priori Power Analysis

Statistical power is the measure of the likelihood that a researcher will find statistical significance in a sample if the effect exists in the full population. Power is

a function of three primary factors and one secondary factor (McHugh 2008) – sample size, effect size, significance level and the power of the statistic used. The most common reason to conduct a power analysis is to determine the sample size needed for a particular study.

A power analysis was carried out using the G power software package. T tests were specified as used as the software does not provide for non-parametric testing.

To control type 1 error an alpha value of 0.05 was used, and to control type 2 error a beta value of 0.2 was used. These are standard values (Pallant 2010). The power of the design is one minus the beta value, which gives a power of 0.8. This means that 80% of the time an effect will be detected. For a medium sized effect (d = 0.5) the sample required was calculated at 128 – which would divide into a control group and an intervention group with 64 participants in each group.

Unfortunately funding and time did not allow such a sample size and it was decided to use a much smaller number of mothers and therefore conduct a pilot study. However, as suggested by Sandelowski (2007), determining sample size in research is ultimately a matter of judgment and experience in evaluating the quality of the information collected against the uses to which it will be put. Crouch (2006) states that within qualitative interview based research (as is a part of this study) the researcher is often required to be immersed in the research field and explore the research question in depth. Therefore, a small number of participants will facilitate the researchers close association with the respondents and enhance the validity of in-depth inquiry within a naturalistic setting. Indeed, with such an emotive subject as PND, the benefit of being able to conduct one to one interviews, in the participants own home environment, resulted in some very rich data. Real life experiences, feelings and emotions were shared with the interviewer. This may not have been achievable with larger sample sizes. The wealth of information gained

from the EPDS scores, the log books, the supervisory sessions and the one to one interviews is immense and, although the sample size is smaller than calculated within a power analysis, the quality of data collated is both in-depth and extremely informative.

CHAPTER FOUR: THE ROLE OF THE PEER SUPPORT WORKER

4.1 Recruitment and Selection

The provision of a Peer Support Worker (PSW) was the intervention used in this project.

An advert was placed in three local surgeries within the Derbyshire area briefly discussing the research project and the requirement for Peer Support Workers (PSWs). The name and telephone number of the lead researcher was given on the advertisement for interested parties to informally contact for further information. The advertisement received a large response and there were over thirty telephone enquiries. After a telephone discussion with the lead researcher regarding the study, required involvement, training requirements, and commitment of time, the number of interested mothers was 23. Due to the large number of interested mothers it was decided to 'host' an informal session lasting approximately two hours at the local Health Centre. The session was coordinated by the lead researcher and a Nursery Nurse kindly volunteered her services to enable a small crèche to be facilitated. The Health Visitors who practiced at the surgeries that were to be involved in the study attended. These HV's had been approached prior to the commencement of the research and had agreed to participate in the trial. A date and time was established and the mothers were contacted and invited to attend.

Twenty mothers attended the morning session and an in depth explanation of the proposed study was given. Emphasis was placed upon time and travel commitments, confidentiality and the expectations of the role of a PSW. The role of the PSW was discussed with the mothers. The PSW was clarified as being a role model who engages an individual (the mother) in to a personal recovery programme – somebody who has significant experience of PND who works alongside others with similar difficulties in order to attempt to facilitate recovery

through promoting hope, and providing support based on common experiences. The group brainstormed what we thought a PSW should offer to their mother and the group agreed on a number of descriptive terms, these included, inspiring hope and optimism, offering empathy, friendship, advice and guidance, shared experiences, optimism, and a listening ear. The group were also keen, at this stage, to have as much input as possible into the design of the support offered, for each of them to be able to think about the type of assistance they would like to provide, their own solutions – and, most importantly, not to have to adhere to any formal procedure or 'tick box' exercise. After a forty five minute presentation by the lead researcher there was the opportunity for a question and answer session.

There were a number of questions posed regarding expectation, expenses, and safety of the workers, length and timings of visits, types of potential problems and training to be received. Due to the high volume of interested mothers it was decided that they would be asked to write a simple, brief statement as to why they wanted to participate in the role and the experiences that they felt were relevant. Each mother was asked to return this statement within a period of two weeks and emphasis was placed again on the opportunity to contact the researcher with any concerns or queries in the meantime. The session was extremely positive and provided the opportunity for both potential PSW's and participating Health Visitors to ask any questions and seek clarification of any issues arising.

Within the two week period fourteen mothers returned their brief resumes as requested. Each resume was carefully read and discussed by both the lead researcher and two of the Health Visitors involved in the study. After much deliberation it was decided to recruit eight mothers subsequent to satisfactory references and Criminal Records Bureau (CRB) clearance.

As previously stated the Human Resource Department (HR) at a large teaching hospital within the Midlands area had kindly agreed to employ the recruited

mothers on a six month temporary contract. This permitted two references for each mother to be up taken by the Human Resource (HR) Department in addition to providing full financial support for enhanced CRB checks. The selected eight mothers submitted an application form as issued by HR and provided the details of two appropriate referees; a medical form was also completed.

The eight mothers chosen were selected because of both their interaction at the earlier meeting, their telephone contact with the lead researcher and the information provided on their personal resume. Although the decisions were not taken without contemplation, both the lead researcher and the Health Visitor did feel confident about the choices made. The remaining applicants were contacted and thanked for their interest in the study.

4.2 Training Programme for the Peer Support Workers

A training programme was established with the assistance of both the four Health Visitors involved in the study, and the Lead Nurse Specialist for Safeguarding Children. The eight mothers attended three morning sessions at the Health Centre and a crèche was again kindly provided by the Nursery Nurse. The mornings consisted of a discussion and recap about the expectations of the PSW, their role, their own expectations and the major importance of confidentiality. The PSW's shared their experiences of Postnatal Depression with other group members and they reflected on their journeys through the 'minefield'. Many of the shared stories were, sadly, extremely negative due to the lack of support and recognition that had been available at that time. This was the main reason for their participation within the study. Each mother reported that if she could help, in some way, to prevent a fellow mother from experiencing what they had themselves experienced then their participation would be positive.

There were, understandably, various concerns from the PSW's regarding the type of approach required, what to do if they felt 'out of their depth', if they did not

establish a good rapport with the mother and if the commitment became too substantial. It had been decided collectively, from the start of the meeting, by the PSW's, not to employ a formal counselling therapy as the whole purpose of the study was to provide empathy and support from a fellow mother who had experienced similar feelings and emotions to that of the mother they were supporting. This was agreed by the lead researcher. The whole concept of the study was for the PSW to be 'themselves' and offer support as a mother of small children who had indeed struggled, in some capacity, with their journey as a new parent. If either party felt that a good rapport and/or relationship had not been established then other options would be explored and discussed. The mothers were very keen to accept this role of 'simply being themselves'. They strongly believed that, as they had experienced postnatal depression, and survived the experience, they could offer sound advice and guidance based on 'real life'. Each worker agreed that they did not want a formal model of counselling /therapy to adhere to; they simply wanted to be a 'peer support' – from one mother to another within a time of need. The group collectively agreed that the intervention was not only 'peer support' but was also 'peer designed.' They wanted to share their personal experiences with their mother, their own beliefs as to what helped them – and what had been their concerns and anxieties when they were suffering from PND. Each PSW felt that, by doing this, it may help to 'normalise' the situation for their mother, may help her to feel that, actually , she is not an isolated case and by sharing their own anxieties it may encourage her to share hers. This would then help the PSW to formalise their own solution as to how they could design the support that they, personally, wanted to provide.

The PSW's, as a combined group, discussed their experience of PND, how they felt, their despair, what made them feel better, what made them feel worse. Many stories were shared and lots of emotions displayed. Although both the researcher and two of the Health visitors were present during the discussion, it was merely as bystanders and a back seat was taken. The PSW's all felt very strongly about the

fact that they wanted to 'lead' the support, design the intervention, and focus upon what they individually felt they could offer to help their mothers. Each worker wanted to attempt to find their own possible solution to their mother's problem – to identify the route of the low mood/anxiety and, through their own ideas and thoughts, work out a strategy to attempt to help. There were to be no formal structured guidelines as to how each support session was either conducted or where they even met their mother. Of course, issues around child protection and confidentiality were unanimously agreed but otherwise the design of the support visit and service offered was left, from the outset, to each Worker.

Supervision would be provided, if required, both prior to and after a visit in addition to 'group' supervision at least once a month. Telephone contact was also always readily available. This would be coordinated by the lead researcher but there would also be additional support if required from the Health Visitor's involved in the study. If at any stage the commitment to the study became too overwhelming or time consuming for the PSW then they could leave the programme without explanation or justification. A confidentiality statement was issued and signed by all participants – this was returned to the Human Resources department.

The specialist nurse for safeguarding children delivered a three hour session talking about the different types of abuse, recognising signs of abuse and neglect and the strategies for reporting any concerns. A question and answer session followed. Scenarios were discussed and the PSWs were allocated case studies to work through individually and feedback. The session was positively evaluated.

These were the only formalities that needed to be adhered to. The rest of the design and implementation was left entirely to the PSW's, as strongly requested by all.

4.3 Number Alternating

As previously discussed, thirty participants were recruited to the trial and by method of number alternating, allocated to either the control or the intervention group. Alternating occurred by allocating a number to each mother recruited (from 1-30) and each even number was allocated to the control group and each odd number to the intervention group. There were fifteen mothers in each group. Each mother allocated to the intervention group was given a PSW. The selection process was primarily decided by geographical area - how far would the PSW have to travel to either visit or meet the mother, and, to some degree, the type of personality the mother was thought to be (as assessed by her own Health Visitor).

After informed consent was obtained by the Health Visitor, the mother's details were telephoned to the lead researcher. The lead researcher then contacted a PSW and gave both the details of the mother and a brief history; it was then the responsibility of the PSW to make initial contact with the mother. Occasionally problems arose making contact as subsequent messages were left on mobile / land lines and calls were missed but these were quickly overcome and each PSW made contact with their selected mother eventually.

Each PSW throughout the study period was allocated two mothers with one PSW being allocated one mother. This was purely circumstantial and not because of any problem with the PSW and their role. Although some relationships were more successful that others, the situation did not arise for a termination of a partnership between a participant and a Worker.

4.4 Use of a Control Group

As suggested by Denscombe (2008), this is the most used and established method of exercising control over significant variables. Two groups of people are identified. The two groups should be similar in terms of their composition (in this study, first time mothers who have an elevated score on their EPDS alongside a

clinical interview). The experiment then involves introducing a factor to the experimental group and leaving the other group with no artificially induced changes – thus, the experimental group received weekly support visits on separate occasions from a PSW and their own Health Visitor, the control group simply had the standard weekly support from the Health Visitor only. Having added the new factor, the Researcher can then look at the two groups again with the knowledge that any difference between the groups may be attributed to the factor that was artificially introduced. We measure the difference between the control group and the experimental group at the end of the experiment. Any differences observed can be logically deduced to come from the factor that had been introduced in the experiment.

The fifteen mothers randomly allocated to the intervention group were assigned a Peer Support Worker within a maximum of five days of their consent being given. The Health Visitor telephoned the Lead Researcher with the mothers' details within two days of gaining consent (where possible). Each mothers' details given were randomly allocated to either group. Due to the nature of the study the mothers could not all be randomised at the same time as recruitment took place over a period of weeks (as previously mentioned). The Peer Support Worker would then be responsible for contacting their mother and arranging a suitable time and venue to meet. This was usually achieved within two days of the participant's details being given. On two occasions the time period was slightly longer (up to five days) but this was simply due to individuals being away on holiday.

The fifteen mothers allocated to the control group were telephoned by the lead researcher and informed as to the group that they had been assigned to and actively encouraged to maintain their log book after each visit form their own Health Visitor. A log book was given to each mother to provide a brief paragraph of how they felt after each visit either by their PSW or their HV. Due to the large volumes of data acquired, the quantitative data (the three EPDS) will be analysed

separately from the qualitative data (log book accounts, notes from supervisory sessions, and one to one interviews which were audio-taped and subsequently transcribed). Each will be explored and discussed in an attempt to form a true, reflective account of feelings, events and day to day emotions as experienced by the participating mothers.

CHAPTER FIVE: ETHICS

5.1 Research Ethics

Researchers must be ethical. In the collection of data, analysing data and in the dissemination of findings all researchers are expected to respect the rights and the dignity of all research participants, avoid any harm to the participants and operate with total honesty and integrity at all times (Denscombe 2008). There is a general agreement that individuals should not suffer as a consequence of their involvement in a research study. In addition, there should be no longer term repercussions stemming from an individual's involvement in a research study.

A researcher has a duty to consider, in advance, the likely consequences of participation and to identify measures that safeguard the interests of the participants who assist in the investigation. This requires a certainty that individuals do not come to any physical harm as a result of the study. Indeed, increasingly, safety considerations are built into a research design. For example, a researcher should consider the issue of personal safety when arranging a time and location to meet a participant for an interview – bearing in mind any potential dangers. The researcher also needs to be aware of their own safety when recruiting participants or, for example as within this study, home visiting to perform face to face interviews. Care needs to be taken to avoid psychological harm resulting from research (Flick 2009). The researcher needs to be aware of the extent to which the study may be intrusive, sensitive, or threaten any beliefs that the participants may hold. Participants should suffer no personal harm arising from the disclosure of information collected during the research study. Disclosure of any personal information may be embarrassing for the individual and, depending on the type of information, could also involve economic loss or even legal action being incurred against a participant on the basis of the disclosed information if it was to come to the attention of any relevant authorities. Researchers need to ensure that they protect the interests of their subjects by ensuring that the confidentiality of any

information given to them. Research data should be kept secure and, when publishing any results, extreme care needs to be taken not to disclose personal identity of any individuals who have contributed to research findings.

This research study was carried out in adherence with The Code (NMC 2008), the Declaration of Helsinki (1964, 2002), and the Research Governance Framework for Health and Social Care (DH 2001, 2003). The Code is the foundation of good nursing and midwifery practice and one of the key tools is safeguarding the health and well-being of the general public. This study was researched with the care of the participants as the primary concern – treating them as individuals and respecting their dignity. The aim of the researcher was to provide a high standard of practice and care, and to be open and honest at all times. The Declaration of Helsinki promotes and safeguards the health, well-being and rights of patients including those involved in research and to ensure that research is subject to ethical standards that promote and ensure respect and protect a 'human subjects' health and rights – this was adhered to within this study.

The ethical principles of beneficence and justice charges researchers to ensure that the benefits outweigh the risks (Polit and Hungler 2001). The potential risk during the collection of data from these participants in this study is emotional distress. If any participants became too distressed during the interview process, the interview would be terminated at once and only resumed if, or when, the client felt able to continue. Due to the sensitive nature of the study a level of emotional distress and upset was to be expected, however if this became too much for the participant then, as clearly stated within the consent form (See Appendices), the client may withdraw from the study at any point without providing any justification as to why they were doing so. The participant's right of self-determination is an essential ethical consideration and the lead researcher ensured that informed consent was obtained. Each participating mother was issued with both an information sheet and a consent form by their own Health Visitor at the initial birth

visit. This visit was conducted at home between day ten and day fourteen post-delivery. The information sheet clearly explained the study and the right to refuse to participate or withdraw at any time during the process. The Health Visitor provided the opportunity to answer any questions prior to the client giving or declining consent.

Methods to protect the participant's right to privacy included all data collected being treated with complete confidentiality and anonymity (Stake 1995). Information on the handling, use and storage of data were included in the participant information sheet. During the retrospective notes review, if any information that indicated a breach of the codes of professional practice (e.g. unsafe practice); the Trust's policies would be followed and reported to the appropriate professional lead within the NHS Trust. During the collection of data in this study this proved to be unnecessary. Participants were informed that if they did disclose any information that indicated that someone was at risk of harm, against the law, unprofessional behaviour or unsafe practice, then this would have to be reported to the appropriate authorities.

A potential ethical issue for researchers is the unequal power relationship that can exist with the researcher having the authority to decide who to enter in to the experiment group and to exert control over how much information to give to participants (Cormack 2000), and mother's feeling obliged to enter in to a study being carried out by Health Visitor's. Their own Health Visitor sought consent, not the Lead Researcher in an attempt to prevent any possible coercion.

Prior to the undertaking of the study ethical approval had to be given by De Montfort University Faculty of Health and Life Sciences Research Ethics Committee. This was granted after two applications. After completing the relevant forms the Lead Researcher was invited to meet before the NHS Ethics Committee to discuss the study. The whole process took approximately a year to complete. At

the time it was most frustrating and extremely time consuming. However, on reflection it is a complex study that does involve aspects of mental health issues. There is also the added aspect of a Peer Support Worker entering into the mother's own home. There could have been consequences and complications arising from both of these elements of the study. The need to obtain approval from such ethics committees reinforces the point that a concern with ethics is not an option – it is a fundamental feature of all good research studies. References were sought and enhanced CRB checks obtained for each worker in addition to the compulsory attendance on a stringent training programme which involved a session with the Lead Nurse for Safeguarding Children. A confidentiality clause was signed and signature witnessed. Each PSW was employed by the Derby Royal Hospital on a temporary contract for a period of six months and a contract of employment was signed. This was a very cost effective exercise as the fees for both the enhanced Criminal Records Bureau (CRB) and the required statutory two references were paid for by the Trust.

Following this, further approval had to be given from the National Research Ethics Committee after submission of both an Integrated Research Application (IRAS) and a REC form. Following a favourable ethical opinion an application had to be submitted to Derby Royal Hospital Trust ethics; approval for the study was granted.

Research Ethics committees have now been established in many areas. Flick (2009) explains that in order to ensure that ethical standards are maintained to the highest order; the committees examine both the research design and method before they can be applied. Good ethical research is then based on two conditions: that the Researchers will conduct their research in accordance with ethical codes and that research proposals have been reviewed by ethics committees for their ethical soundness. Reviews of ethical soundness will focus on three aspects (Allmark 2002). These are scientific quality, welfare of participants and the respect for the rights and dignity of each participant.

This element is particularly pertinent for this study. The risks for each participant needed to be carefully measured. Dignity and rights of the participant are linked to consent given by the participant, to sufficient and adequate information as a basis for giving that consent, and that consent is given voluntarily. The Researcher needs to guarantee participants' confidentiality, which means that the information about them is only used in a way which makes it impossible for any other person to identify the participant or for any institution to use it against the interest of the participant.

For the purpose of this study each mother was given an identification number and there was no use of any names in either the data collection or analysis. All documentation was placed in a locked filing cabinet within the lead researcher's place of work at that time (a Health Centre); access to the cabinet was via a locked room within the centre. The lead researcher was the only individual to be able to access the data within the filing cabinet. Qualitative research is often planned as very open and adapted to what happens 'in the field' (Flick 2009). Methods here are less rigid than in quantitative research. This makes reviews by ethics committees more difficult as it is, for example, difficult to foresee what sorts of data may be collected within an ethnographic study. The openness sometimes leads to a rather comprehensive approach in data collection instead of a clearly focused set of questions or things to observe.

5.2 Informed Consent

All research participants were required to complete an informed consent. This was obtained by their own Family Health Visitor (HV) during the initial visit at home (between ten and fourteen days post-delivery). This was accompanied by a Participant Information Sheet which the mother read in the presence of their Health Visitor thus providing the opportunity to seek clarification or ask any questions that they may have. On four occasions the mother's requested that the HV left the

information sheet with them for a few days so that the study may be discussed with other family members. This was done and consent was successfully achieved within a week from all participants.

Codes of ethics require that all research should be based on an informed consent – the study's participants have agreed to partake on the basis of the information given to them by the Research team (Flick 2009). They also require that the research should avoid harming the participants, including not invading their privacy and not deceiving them about the aims of the research.

Murphy and Dingwall (2003) speak of 'ethical theory' in this context, which they see as being linked to four issues:

- Non-maleficience – researchers should avoid harming participants.
- Beneficence – research on human subjects should produce some positive and identifiable benefit rather than simply be carried out for its own sake.
- Autonomy or self-determination – research participants' values and decisions should be respected.
- Justice – all people should be treated equally.

Individuals should never be forced or coerced into helping with research. Their participation must always be voluntary, and they must have sufficient information about the research to arrive at a reasoned judgment about whether they wish to participate or not. These are the premises of informed consent (Denscombe 2008). For the purpose of this study, if any mothers had further questions and the Health Visitor was unsure of the response then the lead researcher was contacted. This happened on three occasions and after clarification of information, two of the mothers gave consent. The consent form needs to provide information about who is conducting the study and where they can be contacted. There needs to a statement providing enough detail for the participant to understand, in relatively

simple terms, the aims, methods and anticipated outcomes of the study. Ideally this is brief as, with this research, the mother's do not have the time nor do they wish to spend time reading page after page of information. Informed consent presumes that each participant knows, in advance, what tasks the researcher expects them to undertake. They will need to know if they are required to take part in an interview or complete a questionnaire – or both as applicable to this study. However, signing a consent form does not oblige participants to continue in the role if, at a subsequent stage, they no longer want or feel able to. The consent form is certainly not a contract that in any way binds an individual to the task of assisting with a research study. This needs to be made absolutely clear within the consent form and the patient information sheet. Participants should be made aware of this and if they wish to withdraw at any time then they will be allowed to do so without a required explanation.

CHAPTER SIX: QUANTITATIVE DATA

6.1 Collection and Analysis

Each participant from both the control group and the intervention group were asked to complete an Edinburgh Postnatal Depression Scale (EPDS) at six weeks, twelve weeks and at the final interview when the baby is six months old. There were fifteen mothers from the intervention group who completed all three questionnaires at the required stages and fifteen mothers from the control group who completed the questionnaires. The initial EPDS was carried out in each participant's home, by their family Health Visitor. It was carried out alongside a clinical assessment. The second EPDS was performed after the completion of the six home visits (either by the Health Visitor only or the Peer Support Worker in addition to the Health Visitor). Again, this was carried out in the home environment by the family Health Visitor. The final EPDS was carried out by the lead researcher (who is also a trained Health Visitor and subsequently very familiar with the EPDS). This was performed in the participant's own home. The results from all EPDS scores from both the Control and the Intervention group are displayed in the tables and graphs below.

Table 3: Score of EPDS at 6 weeks

	N	Mean	Median	Standard deviation	Minimum	Maximum
Control	15	13.00	13.00	1.30	11	15
Intervention	15	13.20	14.00	1.38	11	16

Table 4: Score of EPDS at 12 weeks

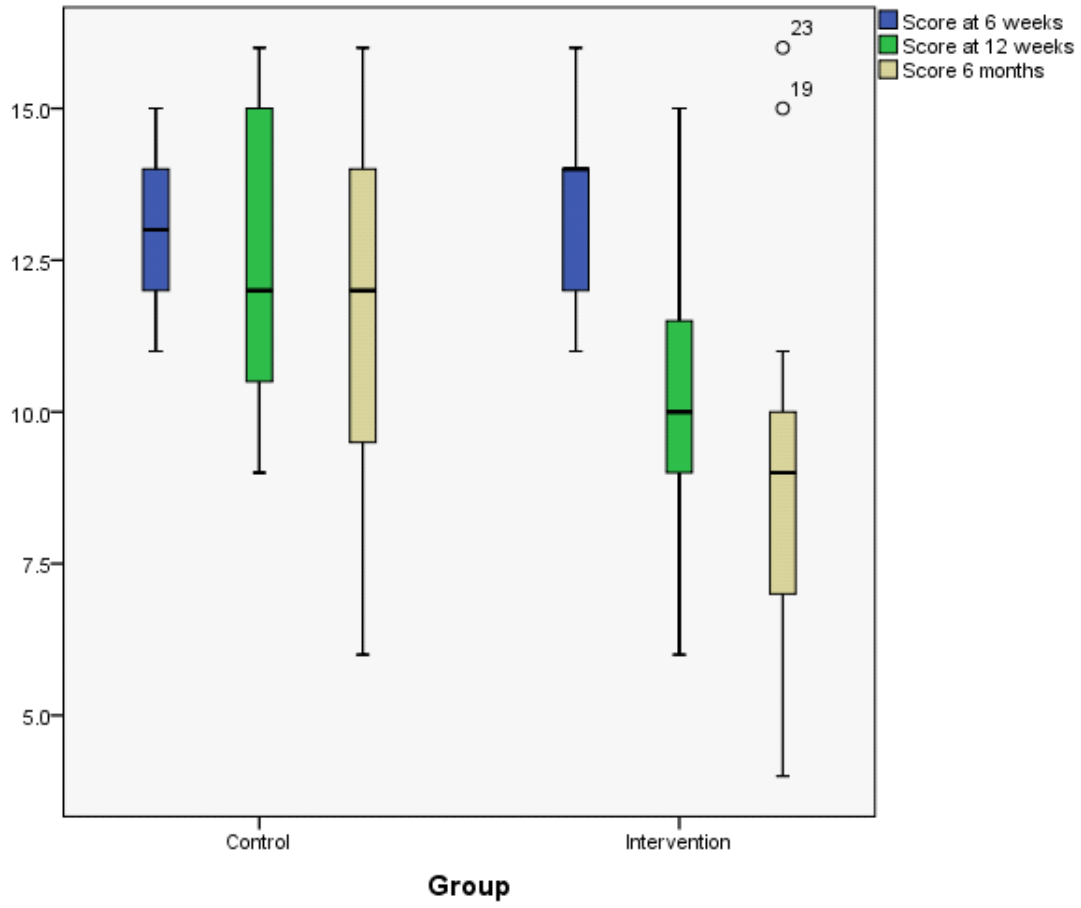
	N	Mean	Median	Standard deviation	Minimum	Maximum
Control	15	12.46	12.00	2.50	9	16
Intervention	15	10.33	10.00	2.35	6	15

Table 5: Score of EPDS at 6 months

	N	Mean	Median	Standard deviation	Minimum	Maximum
Control	15	11.60	12.00	3.18	6.00	16.00
Intervention	15	8.93	9.00	3.30	4.00	16.00

These results are summarised in Graph 1.

Graph One: EPDS Scores at 6 weeks, 12 weeks and 6 months.



The EPDS scores initially taken when the baby is six weeks old show little difference between the participants – for example, for the means at 6 weeks it is a difference of 0.20, the median for the control group is 13 and the intervention is 14 – a difference of 1. However, the statistics start to diverge when the EPDS is

repeated at 12 weeks. The mean at 12 weeks for the control group is 12.46 and the intervention group is 10.33 giving a difference between mean scores of 2.13. The median at 12 weeks is 12 for the control group and 10 for the intervention – a difference of 2. The EPDS is recorded again at six months whereby the mean control is 11.60 compared with the intervention mean which is 8.93; the difference between the two scores is 2.67. The median at six months is 12 for the control group and 9 for the intervention – a difference of 3.

6.2 Distribution of scores

On visual inspection, it is concluded that the variables are not normally distributed – there are two main ways in which a distribution can deviate from normal. These are a lack of symmetry (called skewness) or pointiness (kurtosis) (Field 2013). The decision was therefore taken to use non parametric tests to distinguish differences between the intervention and the control groups. Both a Kolmogorov-Smirrov test and a Shapiro-Wilk test were performed to confirm the appropriate use of non-parametric tests. As demonstrated in Table 6 below, the first set of data recorded at six weeks is statistically significant. This means that it is different from the 'normal' population – confirming that the utilisation of non-parametric tests are appropriate.

Table 6: Kolmogorov-Smirnov Test - Shapiro-Wilk Test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Score at 6 weeks	.236	30	.000	.904	30	.011
Score at 12 weeks	.143	30	.121	.943	30	.109
Score 6 months	.131	30	.200*	.951	30	.185

*. This is a lower bound of the true significance.

[a]. Lilliefors Significance Correction

These tests have fewer assumptions than their parametric counterparts (Pallant 2010). Most of these tests work upon the principle of ranking the data, finding the lowest score and ranking it 1, finding the next highest score and ranking it 2 etc. This process subsequently results in high scores being represented by large ranks and lower scores being represented by small ranks. Field (2013) explains that the analysis is then carried out on the ranks than the actual data.

6.3 Non-Parametric Analysis

6.3.1 Friedman's ANOVA

Friedman's ANOVA was selected because it is used for testing differences between experimental conditions when there are two or more conditions and the same participants have been used in all of the conditions (each participant contributes several scores to the data), these are termed paired tests.

For the control group, the ANOVA was not statistically significant (p=0.062, Chi square= 5.547, df=2). The mean ranks are shown in Table 7. This means that there are no statistical differences across the three times.

Table 7: Distribution of Scores

Ranks	
	Mean Rank
Score at 6 weeks	2.23
Score at 12 weeks	2.23
Score 6 months	1.53

For the intervention group, the ANOVA was statistically significant (p< 0.001, Chi square 18.34, df=2). The mean ranks are shown in Table 8. This means that there are statistical differences across the three times.

Table 8: Distribution of Scores

Ranks	
	Mean Rank
Score at 6 weeks	2.83
Score at 12 weeks	1.87
Score 6 months	1.30

The Wilcoxon paired test was then used to identify where the pair wise statistical differences lay within the intervention group. The Wilcoxon signed-rank test is used in situations in which there are two sets of scores to compare, but these scores come from the same participants (Pallant 2010). The test is based on the differences between scores in the two conditions being compared. Once the differences have been calculated they are ranked but the sign of the difference (positive or negative) is assigned to the rank. The ranks are collected together that come from a positive difference and add them up to get the sum of positive ranks. The ranks that come from the negative differences are also added up to achieve the sum of negative ranks. Where available exact tests were used due to the small sample sizes. Wilcoxon paired test is a non-parametric equivalent of the paired samples t-test. The comparison between 6 weeks and 12 weeks was statistically significant (p= .001, Z = 3.279). The mean ranks are shown in Table 9.

Table 9: Mean Ranks of Scores

Ranks				
		N	**Mean Rank**	**Sum of Ranks**
Score at 12 weeks - Score at 6 weeks	Negative Ranks	14[a]	8.39	117.50
	Positive Ranks	1[b]	2.50	2.50
	Ties	0[c]		
	Total	15		

The comparison between 12 weeks and six months was statistically significant (p=.004, Z= -2.85).

The mean ranks are shown in Table 10.

Table 10: Mean Ranks of Scores

Ranks				
		N	Mean Rank	Sum of Ranks
Score 6 months - Score at 12 weeks	Negative Ranks	12[a]	9.13	109.50
	Positive Ranks	3[b]	3.50	10.50
	Ties	0[c]		
	Total	15		

6.4 Pair Wise Statistical Testing Between Interventional and Control Groups

6.4.1 Mann Whitney Tests

Mann Whitney tests are used when there is a requirement to test differences between two conditions and different participants have been selected in each condition. The Mann-Whitney test relies on scores being ranked from lowest to highest; therefore the group with the lowest mean rank is the group with the greatest number of lower scores in it (Field 2006). The first pair wise test was between the control and intervention at six weeks. The test was not statistically significant (p=0.635, Z= -0.474). The mean ranks are shown in Table 11.

Table 11: Mean Ranks of Scores

Ranks				
	Group	N	Mean Rank	Sum of Ranks
Score at 6 weeks	Control	15	14.77	221.50
	Intervention	15	16.23	243.50
	Total	30		

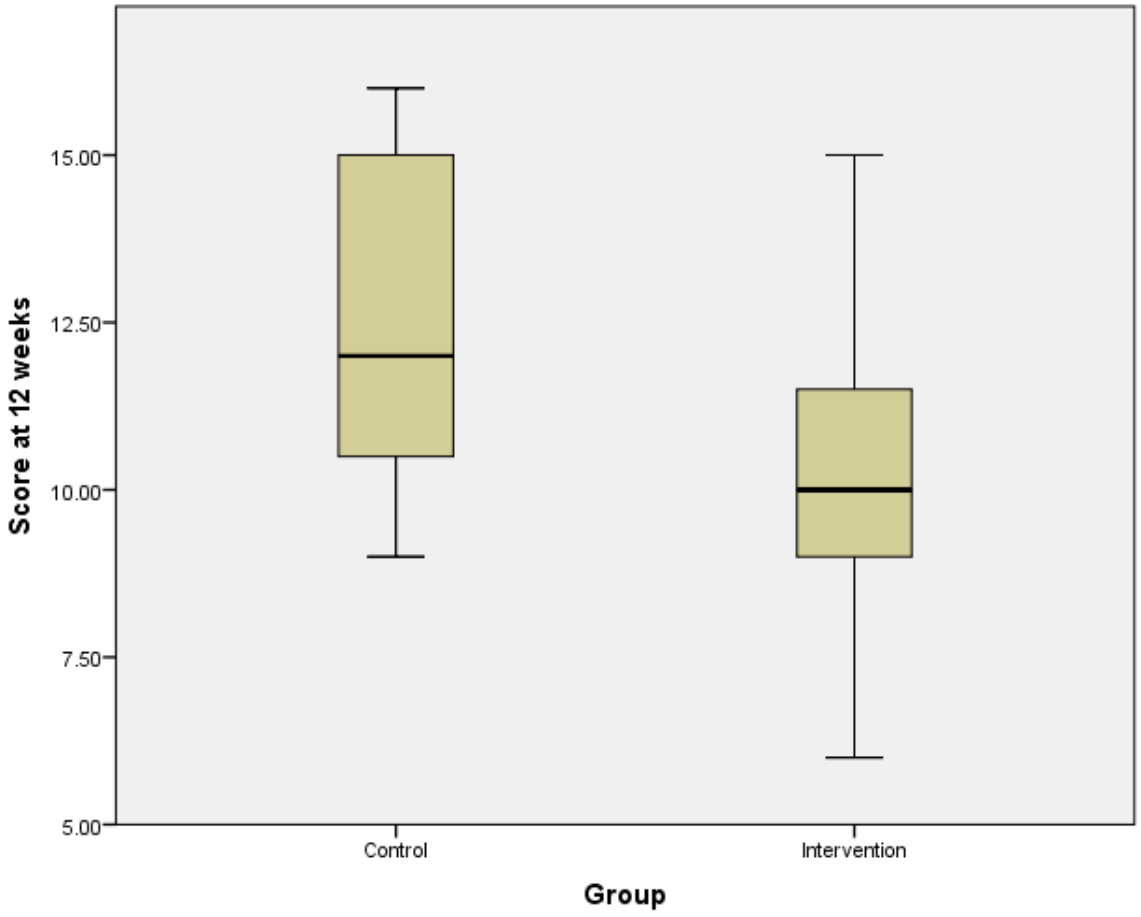
The second pair wise test was between the control and intervention at 12 weeks (see Graph 2)

The test was statistically significant (p=0.033, Z= -2.160). The mean ranks are shown in Table 12.

Table 12: Mean Ranks of Scores

Ranks				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Score at 12 weeks	Control	15	18.93	284.00
	Intervention	15	12.07	181.00
	Total	30		

Graph 2 – EPDS Scores at 12 weeks



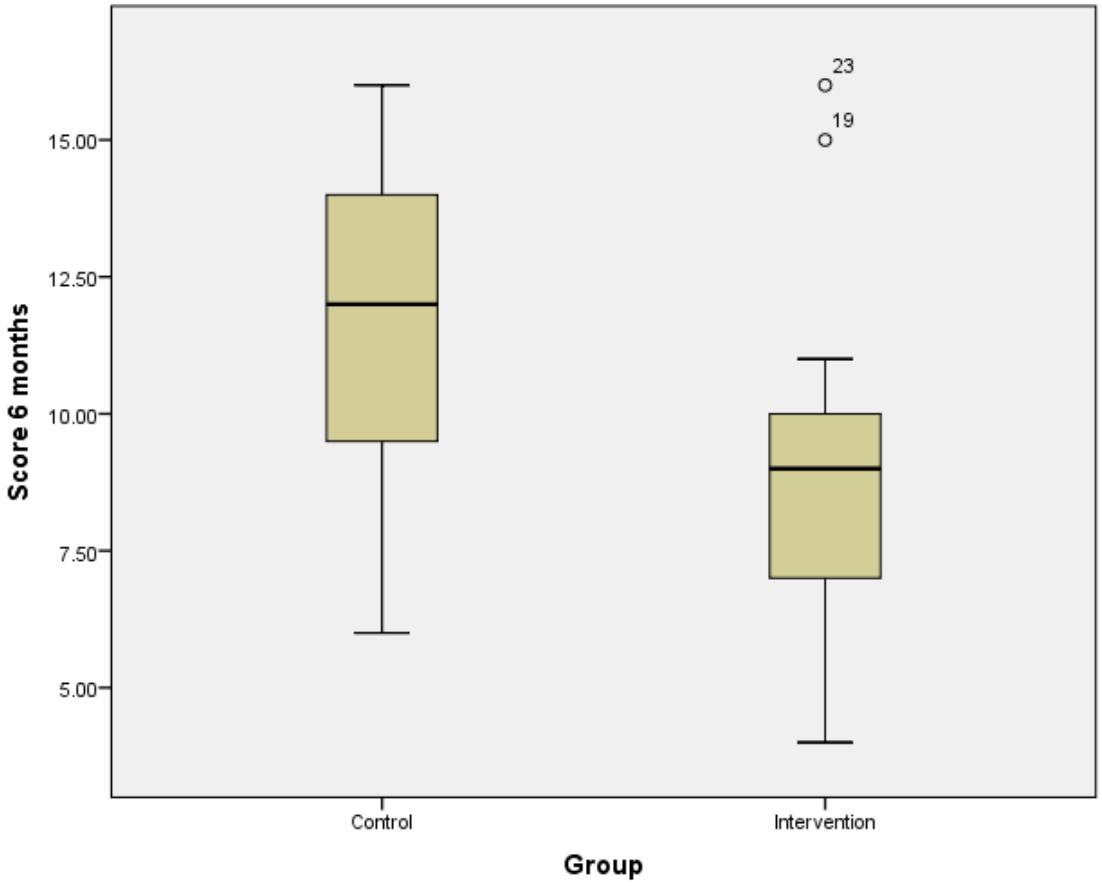
The final pair wise test was between control and intervention at six months (see Graph 3).

The test was statistically significant (p=0.037, Z= -2.085). The mean ranks are shown in Table 13.

Table 13: Mean Ranks of Scores

Ranks				
	Group	**N**	**Mean Rank**	**Sum of Ranks**
Score at 6 months	Control	15	18.83	282.50
	Intervention	15	12.17	182.50
	Total	30		

Graph 3 - EPDS Scores at 6 months



6.5 Summary of Findings

The scores between the intervention and control groups at six weeks were not significantly different. By 12 weeks, the scores had diverged, those in the intervention group were lower and this difference was statistically significant. This difference was repeated at six months. However, two outliers were noted, this was participant 19 and 23 in the control group whose respective scores on their EPDS questionnaire were 12,11 and 10 and 15, 16 and 13 thus displaying an overall improvement in their mental health over the period of the research study.

CHAPTER SEVEN: QUALITATIVE DATA

7.1 Interviews

Interviews can seem to be an attractive proposition for project researchers. It may appear that they do not involve an excessive amount of technical paraphernalia and they draw on a resource that a researcher would normally already have – the ability to conduct a conversation. However, on reflection, although there do appear to be a number of superficial similarities between a general conversation and an interview, it is, in practice, a little more complex. Interviews, as suggested by Silverman (1985) involve a set of assumptions and understandings about a situation which are not normally associated with a simple conversation.

To take part in the interview process there needs to be an informed consent. This is of course imperative from the researcher's point of view in relation to research ethics – this point will be returned to. The interview is, openly, a meeting intended to produce material that will be used for research purposes. The participant needs to fully understand and consent to this. Interviewing is certainly not an easy option and it can be fraught with hidden dangers. It requires good planning, preparation and crucially, sensitivity to the complex nature of interaction during the actual interviewing process. Other factors to consider are the development of an appropriate interview schedule; the environment where it occurs, the questioning and listening ability of the interviewer and the management of the interview (Tod 2006).

An additional hurdle prior to commencing the study was the feasibility of the interview process in relation to costs in time and travel. A number of the participants lived a number of miles away and this did impact on both travelling time and costs of fuel. Although resources were very limited, a small budget was

obtained from the local Children's Centre for the purpose of the interviewing process and expenses incurred.

Although interviews can be purposeful for the collection of straightforward factual information, their potential as a method of data collection is better exploited when they are applied to the exploration of more complex and subtle phenomena (Bowling 2009). If the researcher wants to collect information on less complex and uncontroversial facts then questionnaires may be a more cost effective and less time consuming method.

There was the possibility of attrition if the participant was inconvenienced at all due to the interviews or if they feel uncomfortable in their relationship with the interviewer. This did not occur during the study, in fact, the participants did seem to value the contact with the interviewer and one mother described the intervention as 'therapeutic reflection'. Other potential effects of the interviewing process needing to be considered by the researcher is that the mothers' become conditioned to the study and they respond with answers that they think the researcher wants to hear (Marshall et al 1999). In addition, there is the 'Hawthorne effect', a reactive effect of a study whereby participants change their behaviour simply because they are being studied (Miles et al 1994). In this instance it was not evident that responses were learned or that behaviour changed at all as a result of participating in the study. Each participant appeared to be very open during the interviews and revealed how they were feeling in, on occasions, a very emotive and explicit manner. A number of the mothers seemed to visibly relax during the interview process, and terminology such as 'off-loading' 'pouring out' and sharing feelings' were used. These statements will be described in greater detail during the analysis of data at a later point in the thesis.

One of interviews greatest advantages is the flexibility of both the interview format and structure. The choice of interviews allows all respondents to be asked the

same, or similar, questions while allowing flexibility in both the order and phrasing of the questions (Parahoo 2006). Every respondent is different and each has a personal journey to, hopefully, share with the Researcher. It is crucial within the interviewing process to remember and reflect upon this. Each interview took place in the participant's own home to maintain privacy and confidentiality – this was at each interviewees request as choices of venues were offered. The data was collected by a single interviewer, namely the principal investigator. Each interview was audio- taped, with consent from the mother, and transcribed at a later point.

7.2 Semi-Structured Interviews

A semi-structured approach was used to interview the mother's after the peer support intervention. This approach was selected because the interviewer still required the option of a clear list of issues to be addressed and questions to be answered. However, as described by Denscombe (2008), the interviewer is flexible in terms of the order in which each topic is considered, and, as is crucial in this particular study, the interviewee can develop their own ideas and have the freedom to speak more widely on the issues raised by the interviewer. The questions are open-ended, and there is greater emphasis placed upon the interviewee elaborating their own points of interest.

Each interview was conducted on a one to one basis – a meeting between the lead researcher and the mother. This option of interviewing was that it was relatively easy to arrange – only two people's diaries had to coincide, but, most importantly, the opinions and views expressed within the interview stem from only one source – that particular mother. This enabled the researcher to locate specific feelings and emotions from each individual participant. A further advantage is that the one to one interview is relatively easy to control (Ragin 1994). The researcher only has one participant's ideas and emotions to grasp and understand, and one person to guide through the interviewing process - which, on reflection, can be a minefield! Another advantage from an interview can become evident when the researcher

embarks on transcribing the interview tape. As suggested by Silverman (2000), it is far less complex to transcribe a recorded interview when the conversation involves only one interviewee. There is only one voice to recognise and only one individual talking at any one time.

7.3 Transcribing Audio Recordings of Interviews

Transcribing audio recordings is not a straightforward process. It is very time consuming and for every hour of talk it will require several more to transcribe it. For this particular study there were fifteen control and fifteen intervention subjects.

However, fifteen interviews were carried out by the Researcher, seven from the control group and eight from the intervention group. Qualitative research is very labour intensive and analysing a large sample can be extremely time consuming and often quite impractical (Silverman 2006). Within this study, the researcher felt that after conducting a total of fifteen interviews of both control and intervention participants, little new data or themes were emerging. Therefore it was decided that the interviews were complete and that transcribing of data could now occur.

The process of transcribing is a substantial part of the method of interviewing and is certainly laborious. However, it is a crucial part of the research and, on reflection, brought the researcher ‘close to the data’. The whole process, as described by Denscombe (2008), brings the ‘talk to life again’, and is a real asset when it comes to using an interviewing method for qualitative data. When transcribing the data for this study, the researcher documented informal notes and comments alongside the interviewee’s script. These annotations are based on the memories that return during the process of transcribing and include observations about the ambience of the interview, gestures, outside interferences and other emotions that provided a richer meaning to the words being spoken. With such an emotive topic as postnatal depression it was imperative that the feelings, unspoken

words and expressions from the mothers were captured at the time of interview. This would not have been achieved simply by words alone.

However, transcribing is certainly not without its issues (Denscombe 2008). At times it is difficult to interpret the words being spoken, either because the mother became very emotional or outside noises interfered. Poor audio quality was also problematic on occasions. This posed the difficult decision as to whether these parts of the interview were simply disregarded or some reasonable interpretation was exercised. It was decided to exercise a reasonable interpretation as the data was too valuable to dispose of.

A further issue was that some interviewees did not speak, of course, in concise, finite sentences. Some sentences did require reconstruction so that it made sense in a written form but did not lose the essence of the words that were being spoken. This process is extremely time consuming and often frustrating. Intonation, emphasis and accents used in speech are difficult to depict in a transcript. Although attempts were made to show intonation, emphasis, pauses, and accent this was not always entirely possible. Sadly, the consequence in practice is that some of the data is stripped of some of its meaning.

As mentioned previously, following the transcribing of the data, each interviewee was contacted to check that they believed it was an accurate reflection of their account. As explained by Denscombe (2008), if the interview, as in this study, is concerned with emotions, opinions and experiences, then by clarifying the data the researcher is inviting the mother to confirm that what she said at the time of the interview was a true reflection of her feelings and not simply ‘in the heat of the moment’. This is a useful and constructive clarification on the accuracy of the data. Each participant clarified that this was a ‘true reflection’ of their account.

Themes do emerge from a number of interviews. As suggested by Schon (1983) where themes emerge across a number of interviews, the researcher does not have to simply rely on any one transcript as the only source of what is 'real' or 'accurate'. A recurrent theme across a number of interviews indicates that the idea is something that is shared among a wider group of individuals. Therefore, the researcher can refer to it with rather more confidence than any idea/view that stems from the words of one person only. This was certainly relative within this study and as mentioned previously 'data saturation' was reached after a number of interviews had been conducted.

7.4 The Interviewer Effect

Coxon (2005) demonstrated fairly conclusively, that people respond very differently depending on how they perceive the individual asking the questions. In particular, the sex, age and ethnic origin of the interviewer can have a huge impact on the level and amount of information the interviewee is willing to divulge, and their honesty about the information imparted. The data, subsequently, is affected by the personal identity of the researcher. The impact of the researcher's identity does, of course, depend on who is being interviewed. It is not purely the identity of the researcher that affects the data, but what the researcher's identity means as far as the individual being interviewed is concerned.

Interviewees and interviewers have their own preferences and indeed, prejudices, and these are likely to have some impact on the chances of developing a rapport and a level of trust during the process (Silverman 2000). The effect of the researcher's identity, in practice, will also depend on the nature of the topic being discussed.

With reference to the sensitive nature of this study, on reflection, the interviewer's identity assumed particular relevance. The discussion around personal mental health issues is a very emotional topic and the interviewee needed to feel

completely at ease and uninhibited with the interviewer. If this is not achieved then, as described by Denscombe (2008) there is a distinct possibility that the interviewees may supply answers which they feel 'fit in' with what the researcher expects or hopes from them – thus fulfilling the perceived expectations of the researcher. The quality of data therefore is not a true representation of that particular participant.

There are limitations as to what can be done to reduce this effect. The researcher will bring certain personal attributes which are 'givens' and which cannot be easily altered to suit the needs of a research interview. Conventional advice to researchers as discussed by Strauss (1998) is to adopt a passive and neutral stance. The researcher should be courteous, wear conventional attire and remain neutral and non-committal during the interview. Passivity and neutrality are the required attributes and the researcher's 'self' should be kept firmly hidden – the objective being to encourage the interviewee to 'open up' and not to provoke any feelings of hostility or defensiveness (Strauss 1998).

The Interviewer needed to be personable, relaxed and empathic in their approach - encouraging the mother's to 'open up' and discuss their traumatic experiences and feelings of hopelessness and despair. The aims of this study is specifically to help and empower the mother's and thus the interviewer needed to be inclined towards showing emotion, responding with feeling and engage in a very true dialogue with each mother. As explained by Oakley (1981) the researcher will become fully involved in this style of interview as a person with feelings and with knowledge that may be shared with the mother. However, this style of interview is somewhat 'unconventional' and the researcher needs to be confident and committed to ensure a successful outcome.

7.5 Validation of Reflective Accounts

All participants were contacted following the initial analysis of their log book reflections, notes from their supervisory discussions, and interpretation of their one

to one interviews. This was to ensure the validity of the findings. This contact enabled the researcher to check whether their own understanding of statements made was correct and that the participant agreed with the researchers analysis of the data collected. The content of all participants log books were analysed by the researcher and interpretations discussed. Any queries regarding meaning or grammar were verified and confirmed. Notes of conversations occurring within meetings or supervisory sessions were also shared and accuracy confirmed with the relevant parties.

7.6 Qualitative Analysis – Coding and Categorising the Data

The search for core elements begins by taking the raw data (the interviews and log book reflections) and searching for themes that recur within the data. This was initially commenced by coding and categorising the data. As the lead researcher progressed through the data, initial open codes began to be identified. Careful scrutiny of both the log books and the interview transcript allowed the researcher to ascertain that certain areas of the data did have common themes. Statements were highlighted in different colours according to which theme the researcher felt that they fitted into. Many statements referred to similar issues and carried similar emotions (feelings of despair, worthlessness, guilt, low mood, failure). The areas of data that did have a common theme as identified by the researcher were coded (tagged) as belonging to a broader category (Denscombe 2008).

The codes were descriptive in nature and these involved labelling areas of data in terms of their content. Denscombe describes this as 'open coding'. As the process of coding progressed, relationships between the codes – links and associations that enabled certain codes to be subsumed under broader headings and certain codes to be seen as more critical than others. The lead researcher eventually was able to focus attention on just the key components and most significant categories. This selective coding allowed the focus to remain on just the core codes, the elements that have emerged from both open and axial coding and

are vital to any explanation being reached about the complex social phenomenon being investigated.

By adhering to this process concepts are reached that help to explain what is really happening – ideas that encapsulate the way that the different categories relate to each other (Denscombe 2008). These concepts subsequently allow theories to be derived that provide an account of what is happening or has happened and, in some sense, explain why certain events/feelings occur.

7.7 Constant Comparative Method

The constant comparative method was used as a means of analysing the data (Denscombe 2008). The lead researcher consistently read and re-read text data, compared new codes and categories as they emerged and repeatedly compared them against existing versions. This process enabled the researcher to refine and improve the explanatory power of the concepts and theories generated from the data. Similarities and differences were highlighted and categories and codes were collated under common headings. As developing theories emerged the researcher could explore and clarify them at any stage of the study.

By using the constant comparative method the researcher can never lose sight of the data accumulated, or 'shift' the analysis too far away from what is happening on the 'ground'. Denscombe (2008) explains that this ensures that any theory developed by the study remains closely in touch with its origins in data – it remains grounded in empirical reality.

7.8 Peer Support Worker - Data Collection

Each PSW was asked to maintain a reflective log book and to complete a brief (or lengthy if desired) reflection after each weekly visit was completed. If, in-between visits, the PSW wanted to write down some thoughts then that was encouraged but the main request was completion after a meeting with their allocated mother. This

was adhered to by each PSW although on occasion, due to time constraints, the reflection may have been short.

7.8.1 Analysis of the Entries in to the PSW Log Books

Content was analysed after completion of the study and visits often seemed to follow a pattern with anxiety and unease at the initial meeting to, on completion of the six visits, a great sadness that the relationship was terminating.

A number of common responses seem to emerge from the PSWs reflections, six of the eight workers reflected back on their own experiences with postnatal depression and what a very lonely journey it had been. A number of them (four) commented on the fact that if they had had the opportunity of a support worker then they feel sure that their anxieties, expectations, loneliness and inability to cope would be greatly reduced. Many of the PSWs shared similar ideas as to what they wanted to provide to the mother's. Common responses include '*mum to mum support', 'a listening ear', 'a shoulder to cry on', 'shared experiences'* and 'a *friendly face'*. The data collected from both the reflective log books and the supervisory sessions has been analysed and catergorised into recurring themes.

7.8.1.1 Theme 1: Changing perspectives of the PSW's

As the PSW's relationships developed with their allocated mothers the overall theme that emerged was a change within their priorities, perceptions and expectations. A number of the workers expressed feeling an overwhelming sense of naivety during their interaction with their mothers and described how this actually, on some occasions, heightened as time evolved. They reflected upon how their sensitivity changed through their weekly visits and how unprepared they had been for this. Their expectations prior to their support visits were very different from their expectations on conclusion.

PSW 1 felt initially that:

'*A tidy house and dressed mother was of great importance*'.

However, as the visits continued this became significantly:

'*Irrelevant and totally pointless'.*

PSW 3 felt furious with herself for harboring such *'meaningless'* expectations when the mother was:

'*Barely capable of caring for herself or her new baby*'.

From the analysis of log books and note taking during the telephone calls and meetings, it would be relatively safe to conclude that many of the PSWs had similar concerns and feelings.

The PSW's shared their perceptions and anxieties about the role. Their initial thoughts about wanting to undertake the role were very similar and all of them did reflect back upon their own personal experiences and talked about '*giving something back*', '*making the transition to motherhood smoother for someone'* and *'if I can ease someone's misery just a little then I will be delighted'.*

Anxieties differed a little. PSW 4 said that she worried that she would:

'*Not have anything positive to say to the mother as her own experience had been so negative'.*

She also felt that she would be:

'*Too vocal about how the participant should look after her baby*'

and be:

'*Dictatorial in her approach'*.

Other anxieties included '*fulfilling their role to its potential', 'being supportive enough'***,** suggesting '*different venues to try'* and *'establishing a good relationship with their allocated mother'*.

Following completion of their visits the PSW's discussed, as a group, their underlying expectations as to what they had really wanted to achieve and how greatly these expectations changed through time. PSW 5 confessed that although she did want to provide all of the right support to her allocated mother, she also wanted her to:

'*take control and tidy the mother and her house up'.*

The PSW's described their evolving roles as '*a huge learning curve'*. A number of them had entered into the role with preconceived ideas and aspirations about completely *'curing'* this mother as quickly as possible. This, as time evolved, seemed to become irrelevant - there was no 'quick fix' and any slight improvement in the mothers' mood was recognised as an asset. The PSW's appeared to re-evaluate their whole thought processes throughout their interactions and their perceptions changed as their support continued. A number of them expressed their surprise when, on reflection, they saw how their perceptions had changed. This was not an expectation they had – they had acknowledged that they hopefully may make a difference to their allocated mother but not a difference to themselves, to their own feelings, emotions and inner thoughts.

A number of the PSW's said that they had enjoyed the experience much more than they had expected to and that they felt it had benefited them too as it encouraged them to reflect back upon their experience of PND and how it had made them feel. It reminded them, in a positive sense, of how far they had come and the strategies that they had used at the time to basically, survive. Many of them described feeling *'humbled'* by their experience and how their preconceived ideas and associated standards were actually totally irrelevant and unimportant within the scheme of events.

7.8.1.2 Theme 2: PSW Self-Awareness and Recognition

The PSWs as an entire group did, in their final meeting after completion of all of their visits, feedback how the experience had benefited them individually. They

talked at great length about recognition of themselves, their self-awareness and how far they had come from their own episode of postnatal depression. One PSW described it as a '*light being turned on'* and that although she thought that she had recovered completely from the illness actually, on occasions, she did become rather emotional. However, she did not view this in a negative way but reflected upon her own '*recovery and recognition of self*'.

Each PSW was asked, in turn, by the lead researcher, how they felt about their role and what they could 'take forward' from the experience.

PSW 2 and 4 felt:

'Incredibly positive and uplifted by my input'.

PSW 8 reflected that she:

'Was so pleased that I could maybe help someone in some way'.

The group agreed that it had, at times, been a '*painful', 'distressing', 'thought provoking'* journey and that they had relived, on occasions, their own *'depressive phase*'.

PSW 7 disclosed that it was:

'quite healing for her to carry out the visits as it made her realise that she really had recovered from postnatal depression at last'.

Each worker reflected upon the fact that their interaction with the mother often brought back memories of their own illness but that this *'spurred'* them on to '*really, really help'* and *'make a difference to the poor mother and her new baby*.' Encouragingly, three of the PSWs have subsequently progressed in to a counselling/therapist qualification and role.

A number of the workers expressed their surprise at this recognition of self-awareness – this is something that they had not given any thought to, they hadn't acknowledged what the role may give to them – only what it may give to their allocated mother. One of the workers confessed that she was '*glad that she did* not *think about this aspect prior to starting the programme as it may have made her feel apprehensive about an exposure of her own hidden demons.'*

Another worker had maintained a reflective diary about her own evolvement through the programme – this had not been an intention initially but after two visits she recognised that she was changing her own views and thoughts about where she had come from, her journey, what she could really offer to her mother, and that this opportunity was almost one of *'closure'* for her. She described it as a '*revelation.'* She explained to the group that by keeping this diary it had really helped her to reflect back upon what she had written and how she recognised, in herself, her own thought processes and journey and how this had evolved through her supporting visits. She felt that this added to the support that she could give to her allocated mother.

7.8.1.3 Theme 3: Abandonment

A common response was the anxiety generated by the workers at the thought of terminating their six visits and leaving the *'mother to cope alone'* and '*not have the support anymore'.* This may be seen as a natural reaction. When questioned further about this during group supervision all of the support workers present (in this instance, 7 of the 8) felt that this was an issue with them. Two workers (3 and 4) described feelings of '*guilt*' at '*abandoning their mother'*; others expressed concern that the mother they had been supporting and doing so well may '*slip back in to feelings of despair again'* or '*be completely isolated and alone again'* (PSW 5, 6 and 8). The workers clearly felt that they were providing this relatively short term, intensive support and then withdrawing it. This concerned them and they worried

about whether, after having such support, the situation may indeed be exacerbated once it was terminated.

PSW 6 described:

> *'Absolute panic that all her hard work would be undone once support had ceased'.*

PSW 2 expressed a feeling of guilt:

> *'I almost feel as if I am giving this fabulous support, making the mum feel, hopefully, better, and then taking it all away again without so much as a backward glance – it feels wrong somehow.'*

These are interesting reflections as the PSWs demonstrated a feeling of responsibility to their mothers. Although they had completed their programme of support they were worrying about how their mothers will be when that support is withdrawn – when these mothers are *'abandoned'* once again.. These feelings appear to surprise them as they have fulfilled their 'mission', their work is complete, yet their anxiety and protectiveness about their mother, surprisingly, continues.

Reassurance was given that the support from the Health Visitor and General Practitioner would still be very apparent if required and that although the PSW's work was completed there were and would be other forms of support available to their mothers. This reassurance did seem to help a little but the feelings of '*abandonment'* were revisited regularly throughout the supervisory sessions and within their reflective logs.

7.8.2 Explanation of the Three Main Themes

From the data analysis, three main themes have emerged – the changing perspectives of the PSW, their own self-analysis and recognition, and abandonment. Clearly from these reflections, the PSWs have changed a number of their own perceptions and possibly recognised factors that may have contributed to

their own PND. This may be considered to be part of a 'healing' process for them too – acknowledging their unrealistic expectations through supporting their mother and recognising that these unrealistic expectations may have been a major contributory factor towards their own personal battle against PND.

It is interesting to observe how their role perceptions evolved throughout their support visits – from initially thinking that they could *'cure'* their mother to simply feeling *'humble'* and if they could make *'a slight improvement'* then they would be delighted.

The workers expressed surprise about their changing perceptions and had not expected to necessarily feel this way. They almost had a set agenda of how they would feel and when this was not adhered to then it was often accompanied by feelings of surprise. This was described by one worker as a '*journey of self-awareness.'*

The concerns of 'abandonment' were also very real. Again, this feeling did surprise a number of PSW's, one worker confessed to simply thinking '*yep, I will go in and do my bit and then come away again.'* She recorded that she was '*aghast'* that she actually then worried about what was going to happen to her mother when she had left her.

These themes demonstrate how very differently our preconceived beliefs, feelings and perceptions can turn out to be. How we react to different situations and how different our reactions can be in comparison to what we had initially thought. The PSW's seemed to learn a number of different things from the interaction with their mothers – and each PSW expressed great surprise at the learning curve this had provided them with.

7.9 Control Group – Data Collection

Within this section, the focus will be placed upon the reflective accounts of the participant's (mothers) experiences within the Control Group. This will include how the mothers felt initially after the birth of their babies to the inclusion of extracts from their own personal logs that they were asked to maintain after each visit from both the Peer Support Worker and their own Health Visitor (HV). Mothers within the Control Group – therefore visited solely by their Health Visitor – were also asked to maintain a log after each visit from their HV. All of the mothers allocated a PSW completed their log books after each visit although due to life pressures occasional weeks were missed but invariably 'caught up' on subsequent weeks. Of the 15 mothers within the control group only 8 consistently completed their log but a further two did write in their books sporadically. Their experiences will be shared within this section.

7.9.1 Analysis of the Entries in to the Control Group Log Books and Group/Individual Supervisory Sessions.

There were a total of fifteen mothers allocated to the control group by randomisation of odd/even numbers. Each mother was given a log book to complete after their weekly support visit from the Health Visitor. Of the fifteen mothers, eight consistently completed their reflective logs after each weekly visit, two wrote sporadically completing reflections on three/four of their visits. Extracts will be taken from the log books and the supervisory sessions. The mothers will be identifiable by an odd number (i.e. 1, 3, 5, 7, 9 11, 13, 15, 17, 19). Again, recurring themes have been identified.

7.9.1.1 Theme 1: Hiding from the Health Visitor

A significant number of the mothers described within their reflections a sense of 'hiding' all of their feelings and emotions from their HV. They were fearful of being judged as '*a bad mother*' and often felt an overwhelming feeling of failure and

absolute despair. It appears that the mothers simply bottle up their emotions from their HV and attempt to put on a brave face – thus hiding all negative thoughts within themselves.

Mother 1 **(**Control group**)** wrote within her reflection on Week 1 of her visit from her HV:

> ***'****I simply cannot tell her how I am feeling and that I put a brave face on for the whole of the visit and then crumble when she leaves. What kind of a mother would she think that I was and how she would judge me'?*

Mother 3 (control group) after Week 3 of her home visit:

> '*I am feeling worse and worse, all I want to do is lock myself away with my baby and not speak to or see anyone – just hide away'.*

There appears to be feelings of guilt too, actually acknowledging that being a new mother is not the most 'amazing' feeling in their life. This may be a reflection upon their understanding of the role of the Health Visitor or possibly how their HV portrays herself? This will be returned to at a later point.

Mother 17 (control group) wrote at her first home visit:

> '*I know that my Health visitor means well and does want to help me but she can't understand how I feel...unless you have been there and experienced this awful, awful state then how can you possibly know how to make that mum feel better? I just smile and agree with whatever she tells me but inside I am screaming. I just want to hide away and not see anyone.'*

This mother clearly feels that she simply have to say the '*correct*' thing to her HV. There seems to be the shared feeling that it is simply a '*role*' to the HV and that she is simply fulfilling this role by visiting the mother. The underlying feeling being that HV doesn't really '*empathise or care'* but is simply completing a '*tick box'* exercise. The mothers believe that if they say the right thing, promote the right response then they can hide their true emotions from their HV and she will *'leave them alone'.*

7.9.1.2 Theme 2: Getting the help that I need

A few of the mothers did seek their own support – mainly through desperation - and subsequently found coping mechanisms that really helped them. They have sourced fellow mothers, sometimes accidentally, and this has encouraged them to share their feelings and emotions – without the overriding fear of being judged.

Mother 5 (control group) after fourth visit:

> ***'****I have asked my HV not to visit again as I have met up with my antenatal group, I made the effort to go thank goodness and it was my turning point. I really feel so much better as I chatted away to them all for ages. It was a massive relief to realise that I was not alone in my feelings of despair and frustration****.***

Mother 3 (control group) after Week 6 visit wrote:

> *'I have met up with an old school friend of mine, she got in touch via Facebook as she has just had her first baby. It was fabulous to simply talk to her, she was honest and completely open about the fact that she was not loving the whole experience of being a mum, that she cried, that she craved for it to just be her and her boyfriend again. I felt normal for the first time since I had him and really felt that I was not alone.'*

Both of these mothers have gained support from other mothers and this appears to have really helped them. To share experiences and simply relate to those experiences is clearly a positive step for them – they have found the help that they needed and it simply '*works for them'*. Although they were not allocated a PSW they have sourced – albeit accidentally sometimes - their own form of support from fellow mothers and found this to be greatly beneficial.

Interestingly, when asked if the mothers that they spoke to were experiencing low mood they responded by saying that that wasn't an issue particularly – it was just the:

'*Relief of being able to freely moan and groan about how exhausted you felt or how little sleep you had or even how tearful you were – without the worry of being judged.'*

7.9.2 Explanation of the two main themes

Within these reflections, two main themes have emerged – actually hiding their emotions from the HV and then getting the help that they so desperately need - through sheer desperation.

The analysis of the log books was most interesting as the mothers appeared to write their feelings down freely and with real emotion. They were not given any guidance as to how they should write their log books; the simple instruction was to 'put their feelings in to words'.

The mothers wrote and discussed within their supervisory sessions the overwhelming feeling of simply wanting to '*hide'* from their HV – not necessarily in the physical sense but simply within displaying how they really felt and what their feelings were on a day to day basis. A number of them agreed that there was almost a sense of satisfaction after the visit from their HV if they had successfully managed to control their inner most thoughts and '*got through the visit without*

displaying any emotion'. One mother said that she would almost *'congratulate herself'* if she had remained *'composed'* through her interaction with her HV.'

A number of the mothers state that they would like a *'fellow mum'* to talk to and indeed when contact with another mother is made (either through clinic, accidentally, or 'Facebook') the mothers' do seem to find this a positive occurrence. The mothers talked about '*getting the help that they really needed'* and indeed, this help consistently appeared to come from simply talking to another mother – a fellow comrade, their own peer support, who is at a similar point in her life and who the mother can relate to and share experiences. It appeared that the mother did not have to be feeling low, or tearful particularly, but just available to talk to about the complexities and frustrations of having a new baby.

Some of the mothers talked about the fact that initially they weren't even sure about what would actually help their situation, what would genuinely assist them to feel better. Indeed many of them felt that actually nothing would help them. It was simply by coincidence that they talked to another mother and, as they talked to them, they described feeling '*greatly relieved'* and '*an overwhelming sense of freedom'* – that they were finally *'getting the help that they needed.'*

7.10 Intervention Group – Data Collection

There were a total of fifteen mothers allocated to the Intervention Group by alternation of odd / even numbers. The Intervention Group were asked to maintain a brief log book after visits from both their Health Visitor and, in a separate book, their PSW. They were asked to focus upon their interaction with either the HV or the PSW but not to make comparisons within the account, or to intertwine the two. Of the fifteen mothers within the control group, 12 consistently completed a reflection after each visit and 3 wrote entries mainly following alternate visits, although one mother did only make two entries in her HV intervention log book. A number of the reflections were brief and some a number of pages long! Extracts

will be drawn from the books and the mothers will be identified using even numbers (2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, and 30). To assist in clarification of the data the reflective accounts will be summarised under separate headings of Health Visitor Intervention and Peer Support Intervention.

7.10.1 Analysis of the Entries into the Intervention Group Log Books and Group/Supervisory Sessions.

Health Visitor (HV) Intervention

7.10.1.1 Theme 1: Hiding from the Health Visitor again

Again, as with the previous group, the mothers shared the overwhelming feeling of wanting to hide from their HV. The thoughts and emotions shared were in a very similar vein to the earlier reflections.

Mother 2 (intervention group) wrote in her log book following her first 'listening' visit from her HV,

> *'it was ok, I really didn't get that much out of it as I just put on a brave face and smiled, inside I felt as if I wanted to scream at her that could she not see how I was really feeling. Didn't though, just nodded and said that I was feeling a bit better. I cried for ages when she left.'*

Mother 20 (intervention group):

> *'HV coming at 12 today so I will just hide and pretend to be out. Can't stand all the artificial talk and time wasting. Would rather just shut myself away with my baby and pretend that life outside the house does not exist. Then I can just cry and cry without having to go in to detail as to why.'*

Each of these reflections discusses the 'artificial' relationship that the mothers perceive to have with their HV. It may be categorised as 'for appearances sake' as they appear to simply be saying what they believe that their HV wants to hear. This must exacerbate their symptoms and stresses as they have to completely control their emotions and hide behind a façade. The sheer effort of doing so must be exhausting for them. A number of the mothers did express a desire to simply withdraw from the HV service and therefore avoid the exhausting visit and the sheer effort from hiding their emotions. When questioned about this the responses were identical in the fact that they then worried even more so about being viewed as a '*bad or unfit mother*.'

7.10.1.2 Theme 2: An inability to relate

A number of the reflections and discussions within the group talked very strongly about the feeling that the HV was unable to really provide the support required as she had not experienced these feelings of utter despair, that she could not possibly understand their depths of emotion as she quite simply had not '*been there*.' Interestingly though, when analysing the earlier reflections from the control group, the mothers did not appear to mind that the support they sourced from fellow mothers met in clinic or through facebook was not particularly from mothers experiencing depression – simply the fact that they were new mothers too.

Mother 26 (intervention group) made only two entries in her HV intervention log:

> '*Week 1, just seen my HV, she is really lovely but does not have her own kids so how can she possibly relate to what is going on in my head. How can I tell her that I wish I had not had Joe and how I wish I could go back to work, to my life before him and just carry on as before...'*

Mother 2 (intervention group):

> '*This is the last visit from my HV, stopped crying after a few weeks but just feel miserable after she has gone as I still get that feeling*

that she is judging me, or looking at my untidy house and the unwashed dishes. She really does not understand but then how can she, she does not know what it feels like.'

Again these reflections demonstrate how the mothers do not appear to have any confidence in the input from their HV – often it seems as they believe that because the HV may not necessarily have experienced postnatal depression then she cannot possibly be 'qualified' to give the correct support or guidance. They simply feel that they cannot relate to her, to her role, her profession or her demeanor in general. The professional qualifications do not seem to inspire any confidence; it is real experience at ground level that they are seeking and really believe that they will be reassured by.

7.10.1.3 Theme 3: Desperation leading to action

A small number of the mothers talked about the fact that they become so overwhelmingly desperate that they simply could not control their emotions anymore, the effort of pretense was simply too great. Within the group supervision they did reflect upon the fact that once they had told their HV how they really felt they did feel relieved – it was just such a shame that they had to feel so '*desperate'* before they confided.

Mother 30 (intervention group):

'Had my fourth visit from my HV today, I sat and cried and cried she must have thought that I was really ill as she wanted me to see the GP, in fact she made an appointment for me right then. I just felt desperate. She was really kind but did talk about me being depressed – didn't like that word. When she said that I just wanted her to go away so that I could cry as much as I wanted to – which seems to be all day and all night. I did feel sort of better after I had talked to her though, just wish she hadn't said the word depressed.'

Mother 20 (intervention group):

> '*Got to do something, get help from somewhere, just cannot carry on feeling this way. Will speak to my HV.'*

This potentially may have had a positive outcome as the mother, after disclosing to the HV, did feel that her HV was kind and she did feel a little better. Unfortunately by saying the word 'depressed' out loud the outcome spiraled as the mother clearly did not want to be labelled and felt that this was a very negative comment.

7.10.2 Explanation of the Three Main Themes

Following analysis of data and conversation within supervision there appear to be three main themes – hiding from the HV (again), an inability to relate, and finally desperation leading to action.

Sadly, the mothers' did feel that their interaction with their HV was often simply a paper exercise and a 'false' situation. They felt that they needed to put on a brave face in front of her and she simply could not truly relate to them. This was explained further by some of their reflections whereby the mothers' feared '*being judged*' and subsequently being seen as *'an unfit or uncaring mother'*. It appears that because they felt that their HV had not truly experienced what they were currently going through the how could she possibly understand, or truly empathise? The mothers felt that the interaction was '*artificial'* and therefore a process that they simply had to adhere to.

7.10.3 Similarities between control group and intervention group entries

It is interesting to note that many of the emerging themes are similar to the entries from the control groups log books. Many of the mothers do appear, within their text, at times utterly desperate, exhausted and isolated. They are emotional and describe feeling '*miserable'* and *'crying all of the time'*. As with the control group,

some of them do acknowledge that their HV *'means well'* and '*is really nice as a person'* but particular attention is drawn to the fact that the Health Visitor '*does not have kids of her own so how can she know any of this....she isn't a mum, how does she know what works and what doesn't?*' A mother describes her contact with her HV as '*superficial drivel'* and a further entry focuses upon the '*falseness'* of the intervention. As with the control group there are comments regarding how guilty *they feel that 'they wish that they had not had (Joe) and that life could return to how it was before the baby was born.'*

A number of the themes appear to arise naturally out of the text themselves without the lead researcher needing to make any decisions about the organisation of the content. This may simply be because the mothers within both groups appear to share many common thoughts and feelings – and these feelings are expressed freely. Comments that seem to share similarities were grouped together and thus many common themes emerged. To conclude, these shared feelings, amongst both groups of mothers appear to be, as summarised, a desire to simply *hide away from the HV*, *an inability to relate*, a fear of being judged as a '*bad mother'* by the HV, and a strong belief that the HV ' *simply does not get it'.*

The final theme, amongst a small number of mothers in both the control and the intervention group, was the need to simply confide through desperation, a feeling that they did not have the energy to carry on with the '*façade'* and that if they did not '*get professional help then life was just not worth living.'* It seems such a shame that they get to such a desperate stage before they expose their true emotions and negative state of mind.

7.10.4 Analysis of the Entries into the Intervention Group Log Books Peer Support Worker (PSW) Intervention

The entries within the reflections log book for the PSW intervention were more consistent in their approach and all mothers wrote a reflection at least every

alternate meeting. Many of the writings were long and therefore extracts are taken from the text in an attempt to recognise emerging themes.

7.10.4.1 Theme 1: Personal expectations of the PSW

A number of the mothers within the intervention group talked and wrote about their expectations of their worker and their anxieties about the relationship. Some did not know what to expect and others were concerned that they were going to have too high an expectation of the relationship – that they may '*pin too much hope'* on the interaction and that it may simply *'not work.'* A number of them then asked *'what do we do then?'*

Mother 2 (intervention group):

> *Week One of my visit from my Worker and I have absolutely no idea what to expect, thought about making myself look presentable and tidy the house a little but I simply do not have the energy. She will just have to take me as she finds me I'm afraid.'*

This mother then reflected after her PSW's first interaction:

> ***'***I really liked her, she did not seem to notice my chaotic house or at least she didn't make any comment and I did not feel as if she was judging me at all like I do with my Health Visitor.'*

Mother 20 (intervention group):

> ***'***Week One of my first visit with my Worker, I feel so unhappy and just want this to help me. I am now worrying that I have all my hopes pinned onto this one person and I may end up bitterly disappointed. Will I be able to stop crying for long enough to make her a cup of tea?'*

This mother wrote again on Week Two:

> *'I did cry a lot on my Worker and it felt very weird but was ok. She gave me a big hug and just let me cry. She told me all about her*

own journey through postnatal depression and that helped me such a lot – an unbelievable amount'.

As a clear description of the role of the PSW had not been provided or any models of therapy utilised, the mothers were a little uncertain as to what to expect. This, on reflection, was a positive as the mothers simply 'took' from their PSW what they needed in the form of support. There was no agenda, expectations or 'tick box' exercise, simply a natural interaction between two mothers who had or were experiencing similar feelings of negativity and despair. The mothers who did initially harbor anxieties about their '*high*' expectations of the PSW found that they quickly dissipated and it really did not impinge on their positive relationship with their worker.

7.10.4.2 Theme 2: A person who actually understands

The overwhelming emotion that came from the mothers was the sheer relief at actually feeling able to talk to someone who had really experienced similar emotions to what they were currently feeling – without feeling guarded or concerned about how the other person would view them or judge them. A number of the mothers described the relief at being able to do this as *'exhilarating', 'a huge weight from their shoulders '*and *' a light at the end of a tunnel'.*

Mother 6 (intervention group) wrote:

> ***'***It was my third meeting with my PSW this morning, we actually went for a walk in the park. Can't believe that I was organised enough to be there on time. I felt so relaxed with her as she told me all about how she first felt when she had her twins. I really liked the fact that the focus wasn't just on me and my insecurities but that she shared hers with me too. I came out of myself!'

Mother 10 (intervention group) wrote:

'My Support Worker is lovely, I felt a bit awkward with her to start with as I did not quite know what to say to her or if I could really trust her. This feeling soon went and the floodgates just opened. I told her everything and I felt as if the weight had been lifted, I actually felt upbeat.

The mothers talked about these emotions on numerous occasions throughout their log book reflections – and within supervision. Many of them expressed surprise at the difference the worker had made to their lives and how relieved they were to confide in someone who wasn't a health professional. This seems to be a huge issue – the title of 'health professional' and the fear of how the professional will perceive them – this point will be returned to later.

7.10.4.3 Theme 3: A feeling of release through shared experiences

The mothers reflected upon the great sense of '*release*' that they got from confiding and sharing experiences with their PSW – not even always negative thoughts, sometimes just simply advice and guidance on feeding, weaning or playing with their baby. This advice seemed to increase their confidence and subsequently enhanced their feelings of *'possibly coping'*. It was described on a numerous occasions as a *'huge weight being lifted'*. They discussed the fact that the worker made them feel very positive about their recovery as they had shared the same journey but now felt so well that they felt able to support a fellow mother. The mothers talked about this being *'inspiring'* and '*thought provoking.'*

Mother 3 (intervention group) wrote:

'I have got a lot out of my meetings with my PSW. My Worker is simply fabulous. My best way to describe it is that I could really discuss the nitty gritty with her, get down to the bare bones of how I truly felt. I mean I do tell my HV but I think that I am a bit guarded

as at the end of the day she is a professional. I did not feel at all like that with my Worker, it was a no holds barred relationship and I am going to miss her very much!'

Mother 5 (intervention group):

The great thing about my worker is that she tells me how hard she found being a mum to start with, I didn't tell her about my feeling sick or anything and then she just came out with it and told me how she had butterflies in her tummy all the time. I know that it sounds a bit strange but my heart felt uplifted that I maybe wasn't such a weirdo or a rubbish mum. I felt as if all of my emotions were released'

Mother 28 (intervention group):

'*Really love meeting up with my Worker, we get on great and she has two little boys so we talk lots about how things are and she shares loads of tips with me and advice. It comes straight from her own experiences as a mum rather than a manual. She feels like the expert really! I like that.'*

These interactions are clearly very positive. The mothers appear to relax and relate to their Worker and share many common experiences – this seems to be the real crux of this relationship – shared experiences, both from being a mother but also from having suffered from PND – and in the case of the PSW, actually recovering, positively, from the illness. It appears to inspire hope amongst the mothers that they too, would one day feel better.

Mother 30 (intervention group):

'*My Worker was great, she had really bad postnatal depression and we talked for ages about how we felt. I could really relate to*

her. She encouraged me to see my GP and I am so glad that I did. I just felt that she had been there and had come through it and therefore there was a light at the end of the tunnel. I need to see that light as at the moment all I see is blackness.

These reflections demonstrate the comfort that the mothers gain from the fact that their worker really has experienced, in some capacity, what they are feeling and, on an even more positive note, recovered from such emotions and negativity. A true sense of being able to relate to one another and this provides a level of normalising what the mothers are going through. Perhaps this is the key to the feeling of '*release'* that almost all of the mothers talk about – the complex issue of normalising PND and thus avoiding the stigma that these mothers still clearly feel so very strongly about.

7.10.5 Analysis of the Three Main Themes

Following analysis of the log books and the conversation within the supervisory group, there appears to be three main themes. Initially the mothers were a little apprehensive about meeting their worker and what to really expect – potentially were their expectations too high? Should they have any expectations? What if these were not met – what could they possibly do then? However, these concerns rather quickly dissipated and there was an overwhelming sense of being with someone who finally *'got it', 'really understood' and 'had actually been there'.* This was described as a feeling of *'release.'* Suddenly all of the pent up emotion and worries could be shared with someone who they felt was not going to judge them or think that they weren't a good mother – because they had once shared those emotions and anxieties too.

The mothers viewed the PSW as '*the expert'* and seemed to almost respect and thrive upon their workers journey through depression and subsequently the advice

that they could provide because of the hands on experiences they had had – and survived.

7.10.6 Similarities between the participants and the peer support workers entries/discussions.

Following the exploration and revisiting of the documentation within the log books – and the discussions within the groups – it is most interesting to observe the similarities between both the participants themes and the PSW's themes. Although they are each coming from a different perspective the common issues; ways of thinking, and talking, are very integrated.

The PSW's discuss, as clarified earlier, their changing role and perspective and, indeed, the mothers seem to alter their perspective as they become familiar with their worker in particular. Their perspective changes from one of apprehension and trepidation to looking forward to seeing their worker and valuing their input considerably. The PSW shares a similar transition – actually enjoying their supportive role. As with the PSW's, the mothers self-awareness is heightened throughout the support offered and some seem to become more aware of what they actually feel – and subsequently, require. They recognise their anxieties, their emotive state, their, at times, irrational thought process - and this self-awareness appears to encourage some of the mothers to really embrace the support from their worker. The PSW's express feelings of self-awareness too – they acknowledge how far they have come, their journey of recovery and, at times, what a desperate period it had been when they were unwell. This can also be recognised within the mothers in the control group who sought their own supportive networks – sadly, through desperation.

As with the PSW's, the mothers receiving intervention seem to change their personal expectations. Both realise that this is not a 'quick fix' solution and each participant, over time, almost 'settles' into their expectation. The expectations seem

to become more realistic and any benefit or slight mood lift becomes a recognised advantage and positive step on both parts. Again, this is reflected by the control group too when they finally find some solstice.

Each talks about the 'understanding' that they share, that they seem to understand one another and can relate to how the other is really feeling – the PSW from the perspective of having 'been there' and the mother from her current position. It seems to be a release of emotion on both parts – and each individual actually benefits from the interaction.

As the mothers and PSW's progressed with their support visits they both appeared to become more comfortable within their different roles, opened up more freely and indeed, very valuable experiences were shared and benefitted from.

7.11 Interviews

When the infants were approximately six months old the lead researcher contacted the mothers from both groups, via telephone, and requested that a home visit was arranged. The lead researcher provided a full explanation as to what the interview process would be involving and why this request was being made.

It was explained that, as the final part of the study, the lead researcher was keen to explore how the mothers felt a number of months after the intervention had ceased, how well they were feeling (or not), an opportunity to discuss any thoughts or feelings that they may have and also to repeat the EPDS score in order to make a comparison to their previous recordings.

It was decided by the lead researcher to use an 'unstructured interview' approach (Wooffitt 2005). The unstructured interview goes further in the extent to which real emphasis is placed on the interviewees thoughts. The researchers' role, as described by Wooffitt, is to be as un-intrusive as possible. The researcher

introduces the theme/topic but then allows the interviewee to discuss their thoughts, feelings and ideas without any real guidance from the interviewer. These styles of interviews allow the participants to use their own words and develop their own thoughts. Denscombe suggests that this type of interview have, as their main aim, 'discovery' rather than 'checking'. This is very relative within this particular study. The lead researcher really wanted to explore the mothers' feelings and emotions and to see how they felt a number of months on following either the Health Visitor support or both the Peer Support Worker/HV support.

From the Control Group, 13 mothers consented to an interview; the remaining participants did not consent due to a return to full time work and simply did not have the capacity to arrange a meeting. However all of the mothers agreed to complete the EPDS scoring questionnaire. From the Intervention Group, 14 of the mothers consented to an interview, one had returned to full time work and again, did not have the opportunity to be interviewed, but all participants agreed to complete the questionnaire. All twenty seven mothers were agreeable to being audio taped and were advised that the recordings would only be listened to by appropriate personnel – i.e. the lead researcher and a member of administrative staff who had agreed to transcribe the data. The administrator signed a confidentiality agreement prior to being involved in the transcribing process. The recorded material was kept in a locked filing cabinet and the lead researcher was the only individual to have access to the cabinet.

7.12 Audio recording

A number of the mothers' did express that they felt a little inhibited by the process of recording but did seem to relax after a short period of time. The lead researcher attempted to make the audio recording as unobtrusive as possible.

Audio recordings, as discussed by Silverman (2006), offer a permanent and fairly complete record. They also lend themselves to being checked by other

researchers if required. However, Denscombe (2008) does draw attention to some downsides. The recordings only capture speech and miss non-verbal communication and other contextual factors. He suggests that video recordings may be a preferable option as they capture non-verbal as well as verbal communications and therefore provide a more complete record of events – this option was not considered as it was felt to be too intrusive for the mothers due to their possible fragile state and the potential disruption to the interview setting.

All of the mothers requested that their interview was carried out within their home environment. The interviews were arranged via telephone at a mutually agreed date and time. The data from the interviews with the Control Group will be analysed separately from the data obtained from the Intervention Group.

7.13 Transcribing Audio Recordings of Interviews

The transcribing of the recorded interviews, as described by Denscombe (2008), 'brings the researcher close to the data' once again. The end product of the process provides the researcher with a form of data that is easier to analyse than the audio recording in its original state. Some problems did occur within the process of transcribing. The recorded conversation was not always that clear – often due to outside noise interference or, on occasion, poor audio quality. Punctuation had to be added so that a reader could understand the sequence of words – the conversation had to be reconstructed so that it did make sense in a written format. Data is also stripped of some of its meaning as intonation, emphasis and accents are obviously hard to depict in a transcript. The, at times, extreme raw emotion that some of the mothers displayed during the interviewing process could not be put in to words – this did result in some of the meaning being sadly lost. As previously mentioned, following analysis of both written and verbal data, all of the participants were contacted by the researcher to clarify that the interpretation and conclusion drawn was, in fact, how the participants themselves perceived it to mean or be.

7.14 Interviews with Mothers from the Control Group

As mentioned previously there were seven interviews carried out, in their home environment, with the mothers from the Control Group – the mothers that had received weekly intervention from their Health Visitor only. Fully informed consent was obtained prior to the interviews being carried out; this was obtained by the lead researcher who was conducting the interview process. Due to the large volume of material obtained and the, at times, very lengthy interviews performed, key text will be discussed and included. The interviews were up to an hour long in duration as the mothers did appear to really want to discuss their feelings and thoughts about both their illness and input from the Health Visitor. The interviewer, on four occasions, had to bring the session to its conclusion as the volume of data would have exceeded what was really required. The mothers will be identified using an 'odd' number sequence (1, 3, 5, 7, 9, 11, and 13) and all infants have been given a pseudonym.

The lead researcher opened the interview by asking the mother to 'share her story' of how she felt when she had her baby, to discuss the support that she received and how she had found the support – could anything have made her experience better and, finally, how she was feeling now. The interviewer explained that there was no specific order to the interview or specific questions to formally ask, and that they simply wanted the mother to use her own words to describe her experiences/journey. The lead researcher was aware of displaying sensitivity to the mother as she had been through a very difficult time – it is also a skill, as suggested by Denscombe, for getting the best out of an interview. Where the interviewer is able to empathise with the informant and gauge the emotions of the interviewee, they will be in a better position to coax out the most relevant information and encourage full participation and true feelings.

7.14.1 Extracts from the audio recording of the one-to-one interviews with the Mothers from the Control Group

7.14.1.1 Theme 1: Regrets for passed times and experiences

During the interviews a number of the mothers talked about their regret at missing out on their child's initial months. They talked, openly, about the fact that they could not remember when their baby first smiled, or held their head up or slept through the night as it was '*simply a blur of tears and helplessness'*.

Mother 1 (control group):

> *'As time has gone by, I mean Sophie is six and a half months now, I do feel better but I think that I missed out on all of her early weeks as I was so depressed. I just could not face anyone or anything, my poor partner must have wondered what the heck had happened and what a she devil I had turned in to. Every day just seemed to become even worse than the day before. Just feel so sad on all the things that I can't remember about her early months.'*

Mother 5 (control group):

> '*I still feel so guilty as I just cannot remember the very simple things that he did for the first time. I can remember just thinking I wish he was a toddler so that he could be more independent. I can't even recall when he smiled – and that makes me feel so gutted.' (starts* to *cry).*

There are such strong emotions within some of these comments. The sense of guilt that emanated from the mothers was incredibly overwhelming at times during the interviews – and the interviews did have to be terminated and resumed on a number of occasions. One of the main problems appears to be the feeling that they should have been enjoying every single moment of motherhood – that is an

expectation of society – and the hard fact is that they did not; this then brings on the all-consuming emotion of guilt and regret. This subsequently heightens their feelings of despair and so the cycle sadly continues.

7.14.1.2 Theme 2: But what actually helped?

The mothers did reflect back upon what actually did help them in their months of despair, they seemed to enjoy talking about this aspect of their journey – almost as if there was one positive factor to focus upon during their illness. A number of them, during the interview process, returned to what helped them on a number of occasions – almost as if they were reassuring themselves that there were some positive aspects during their months of despair.

Mother 5 (control group):

> *'My turning point I think was meeting up with the other mums from my antenatal group. I did carry on seeing my health visitor and did that questionnaire but I didn't get it, I felt that she just turned up to see me because she was obliged to but was probably relieved when she could get away from me. I just loved meeting up with the other mums and they were definitely my saviors'!'*

Mother 13 (control group):

> *'I think that it was just such a massive shock to have this thing with me (the baby) who did not do anything apart from cry, eat and poo! I did not enjoy those early weeks but then I met up with an old school pal and she had a baby just a few days older than mine. Turned a corner then and we met up all the time – just company really and someone that I could chat to about being exhausted and fed up.*

Mother 10 (control group):

> *'The mums that I met in the clinic were my turning points completely and from that day we met up regularly and just shared stuff, you know, like how tired we felt, how fed up we were sometimes...how irritating some things were. All the kind of things that I could say to them but never to a health person. It just made me feel so much better thank god.'*

As suggested in earlier reflections, again the recurring turning point is finding a mother and sharing time and experiences. One of the mothers said that she felt completely surprised by how much better an interaction with a fellow mother made her feel, what a simple idea it was but what a huge difference it made.

7.14.2 Explanation of the Two Themes from the Control Group

There appeared to be an overwhelming sense of regret amongst these mothers for forgotten experiences – a sense of regret and guilt that they missed out on their child's early days and the milestones achieved.

This sadly, as suggested by Aiken (2001), has implications on the 'bond' that a mother shares with her developing child, and, as previously mentioned within this study, the cognitive and emotional development of the infant.

Many of the mothers referred to their lives prior to having their baby and reflected on '*how much they preferred it'*, '*their own space, time and sanity*.' However, they then talk about their regret at not enjoying the early days and the fact that certain milestones '*simply passed them by.*' This appears to have left a number of the mothers with feelings of immense guilt – as if they had '*failed*' in their motherhood role as each milestone achieved is not ingrained in their memory.

The other common, repeating theme is the reference to *'what actually helped'*. This is something, as previously mentioned, that they consistently revisited during the interview process – almost as if it was providing them with a form of comfort, reflecting back upon what made them feel better, what assisted their recovery, a positive factor that they can focus upon and almost, take comfort from.

7.15 Interviews with Mothers from the Intervention Group

As previously stated, there were a total of eight interviews carried out with the participants from the intervention group. This group had received weekly support visits from both their own Health Visitor in addition to a weekly visit from their allocated PSW. Interviews were conducted in exactly the same way/conditions as the interviews with the control group. The mothers are identified using even numbers (2, 4, 6, 8, 10, 12, 14, and 16) and all infants are given a pseudonym. Again, a huge amount of data was obtained from the one to one interview so 'key text' has been used within this section. The interviewees were very keen to discuss their experiences and share their feelings and the interviewer did have to draw the interview to a close on five occasions. As explained previously, this was conducted in a very sensitive manner.

7.15.1 Extracts from the audio-recordings of the one-to-one interviews with Mothers from the Intervention Group

7.15.1.1 Theme 1: Empathy

The over whelming theme that emerged consistently throughout the interviews with the mothers from the intervention group was that of empathy. This particular word was used on numerous occasions during the interaction. The mothers discussed, within supervision, how they didn't have to go into great detail how they felt sometimes – that their worker simply seemed to just know and really understand.

Mother 2 (intervention group):

> *'During my first visit you know I actually felt my anxiety levels coming down just whilst I was talking to her, and I imagined my heart rate slowing to normal. For the first time in ages I felt ok about myself. I could cry just thinking about it. She really seemed to just understand and this showed in her body language and the conversations that we had'.*

Mother 4 (intervention group):

> *'My Worker was just so nice. It made me open up more as I could honestly say, gosh, I feel like that too, yeah, I wake up with that horrid feeling too. It was like she just knew, you know?'*

Mother 6 (intervention group):

> ***'**Anne, my PSW, simply listened and just understood. It was like been there, seen it and done it. I just felt that she was really empathic. Sometimes I did not have the energy to talk about how I felt on a particular day but she just got it.'*

These reflections demonstrate the positivity that the mothers received from sharing time with a fellow mother and sufferer. They feel at ease and that they can be themselves without the fear of being judged or misinterpreted, the PSW has experienced how they are currently feeling she can empathise, and this obviously has a huge bearing on what they feel they can disclose and how they relate to their worker.

7.15.1.2 Theme 2: An Expert

A number of the reflections describe the worker as '*the expert'* – and when asked about this terminology the general response was that because they have experienced the despair and the catalogue of emotion then they really did know

what they are talking about - they were an expert within this field. This is an interesting observation as the worker does not have any formal qualifications in this subject area, as the HV does, yet they are categorically viewed as the 'expert' by the mothers.

Mother 12 (intervention group):

> ***'***My worker knew all about how I felt, she could almost describe to me how I was feeling at a particular moment because she had experienced it too – it was like a breath of fresh air.'

Mother 14 (intervention group):

> I would tell my worker how I felt and she would be like yeah, I felt like that too, and this, and this. It just felt as if I wasn't going nuts after all.'

Mother 3 (intervention group):

> 'Jo (my Worker) would tell me how she had felt in certain situations and I would think oh thank god, it isn't just me, she totally gets it and look at where she is now'.

7.15.2 Explanation of the Two Themes from the Intervention Group

The mothers from the intervention group interviewed appear to have gained a great deal of positive therapy from their interaction with the allocated PSW. There are a number of quotes drawn from the data obtained that seem to follow a similar pathway - the reassurance, the hand holding, the inspiring of confidence and the presence of a person that they really feel that they could talk to with no *'bars held'.* This is then often categorised by the mothers under the umbrella term of '*empathy'.*

Their PSW is viewed as a '*fellow mum'*, *'someone who has survived the awful illness and come out the other side', 'a confidante', 'a friend', and someone that*

they can 'completely trust and relax with.' There certainly does not seem to be the same anxieties linked with sharing their inner most thoughts with their PSW.

Such normality has the knock on effect of enabling the mothers to feel as if they have, for a short time '*returned to the human race'* and *'carried out a simple, enjoyable activity'* that makes the mother feel as if she is '*fulfilling a normal role again even if only for a short period of time'*. Many of the feelings and emotions shared are feelings that the PSW appears to be able to relate to and this, again, has a positive impact on the mothers. The issue that the PSW can actually remember experiencing similar feelings of despair and has '*survived the experience'* reflects very positively upon the mothers emotions. The mothers talk about the PSW's '*expertise'* and the worker is often referred to as '*the expert'.* When asked to define the word expert one of the mothers simply said '*been there, seen it and done it'.*

7.15.3 Common issues, concerns and ways of thinking

Although the themes have been presented according to the intervention group and the control group, it would appear that many of the statements made applied to both groups. Obviously the control group did not experience the support from a PSW but both participants talked about their regret for 'past times, missed opportunity'. They shared how they felt about the early days, how exhausted and tearful they had been, how resentful they were of their child – but, months on, how they regretted the fact that the early days had been so difficult – and the regret that they can never have that time again. The mothers who sought help from attending clinics or meeting up with fellow mothers described very similar feelings to those expressed by the intervention group – feelings of relief, that they are not alone in their despair, the freedom to express their pent up emotions, and a sense of normality – what actually really did help.

CHAPTER EIGHT: CONCLUSION

8.1 Discussion of Findings

The aim of this study was to explore whether, or not, the allocation of a Peer Support Worker (PSW) to a mother considered to be 'at risk' of Postnatal Depression (PND) would improve the health and well-being of the mother. The subsequent findings have the potential to be used by Health Visitors, Community Nursery Nurses, Community Staff Nurses or Midwives, Obstetricians and GP's who inform, educate or support mothers' within the community setting.

The quantitative data clearly demonstrates, through the recording of three EPDS scores, a positive outcome from the PSW intervention. The control group and the intervention group have a very similar recording at the initial EPDS score (a minimum of 11 for both groups, 15 maximum for the control, 16 maximum for the intervention group), this subsequently changes when recorded at 12 weeks after the six visits have been completed (a score of a minimum of 9 and a maximum of 16 for the control, a minimum of 6 and a maximum of 15 for the intervention group) and again at six months when the score is recorded again (a minimum of 6 for the control and 4 for the intervention, maximum of 16 for both groups). This is demonstrated in a number of graphs/tables within the quantitative chapter.

A post hoc power analysis was conducted using the G power software – as used with the a priori power analysis. The sample size was 30 and the effect size (Mann Whitney Z score divided by the square root of the sample size) was 0.38. The results concluded that the sample size – 15 participants in each group, gave a low power of 0.171.This confirms that this study could best be described as a pilot investigation, and that a larger study is needed to confirm the effect of the PSW role.

The qualitative data gathered can be used to explore why the scores diverge – thus utilising the mixed methods approach.

Having analysed all of the qualitative data collated a number of key themes seem to have emerged. As explained previously, the themes were identified by coding and categorising all of the information collated from the qualitative data. The Peer Support Workers' talked about their changing perspectives, self-awareness and how, as their support visits progressed, their expectations, and ideas about their role evolved. Issues that had seemed to be important at the beginning of their visits became irrelevant and idealistic. Clearly this has been a huge learning curve for them too – this was not an initial intention of the lead researcher but may be viewed as a positive factor. The PSW's talked about their journey through the counselling sessions and how this enabled them time to revisit their own experience and acknowledge how far they had come. They all reflected upon what a positive factor that was. They also talked about the fact that by providing support to the mothers enabled them to re-evaluate themselves and their own lives – this encouraged them to reflect upon how incredibly thankful they felt about their recovery from PND but also to acknowledge what a very difficult and emotional time it had been.

The PSW's, as previously mentioned, did not receive any formal guidance as to how to support their mothers. An early consideration by the researcher was to utlise a cognitive behavioral approach but this was dismissed within the planning stage. The PSW's all felt that they should simply 'be themselves', to share their own experiences, and journey, and to talk about what really helped them. The PSW's planned and implemented their own intervention – they utilsed their personal experiences both as a mother, and as a previous postnatal depression sufferer. Each PSW wanted to identify their own allocated mothers issue, explore their journey through talking to them, empathising with them, and simply getting to know them. They then wanted to plan their own 'strategy' as to how they could assist. This clearly proved to be a major strength within the study as the mothers' felt that they could truly 'relate' to their worker. Within the analysis of data this

became very apparent as a number of mothers' expressed the sheer relief at being able to talk to a 'fellow sufferer.' The fact that they had survived PND and now felt strong enough to provide support to someone who was going through the same experience was an inspiration and provided evidence that recovery was possible. If a formal model of therapy had been practiced within the intervention then this may have had a negative impact upon the 'relaxed' approach used by the PSW. The mothers may have viewed them as 'a professional' and this may have impacted upon the style of relationship between them and their PSW.

The one major concern that became apparent through their reflections was the worry about 'abandoning' their mothers when the counselling sessions had concluded. This was obviously an issue with a number of the PSW's and something that they had given very little thought to prior to commencing the role. A number of them expressed '*surprise at the responsibility they felt towards the mother that they were supporting'*. This, on reflection, is a positive factor as the PSW's have clearly embedded themselves within their role and feel very committed towards their allocated mother. It may be an issue that should be addressed within future training programmes for Peer Support Workers – an acknowledgement towards the affinity that they may feel towards the individual they are supporting.

The mothers within the intervention group talked about what they felt really did help them, which qualities they found beneficial within their worker – they, like the PSW, discussed their 'changing perspective.' Many of these qualities were the same and, following analysis of log books and notes taken during supervision, they have been summarised as follows - relationship, listening, empathy, reciprocity, support, hope, care, compassion, expertise and role model. These themes can be grouped together under a more generic concept - emotional support.

All of the themes are underpinned by the particular type of relationship that the mothers seem to be able to relate to in the case of their Peer Support Worker – that of a therapeutic, supportive relationship. The common over-riding themes that seems to be occurring from this collection of adjectives are, personal experience and expertise. The discussion will be framed using three underpinning concepts – expertise, emotional and social support.

Having transcribed the audio-tapes from the face to face interviews and studied the log books, these themes, relationship, listening, reciprocity, support, hope, care, compassion, expertise and role model, appear several times repeatedly with different participants. The personal experience of the PSW from having had PND is a major primary factor with the mothers. They feel 'akin' to their worker as she has actually felt, and survived, what they are currently feeling. The PSW is described as an 'expert' because she has experienced the illness and is aware of how despairing the situation can be. A number of the mothers felt that their time with their Worker was '*therapy*' and they looked forward greatly to '*their weekly therapy session*'. The mothers reported feeling that because of this their own confidence is uplifted and they feel hopeful, more optimistic - they can visualise '*a light at the end of their long tunnel'*. The belief that their Worker has survived the illness '*intact*' and is now so positive that they are actually supporting other mothers with PND is described as both '*uplifting'* and '*refreshing*'.

The mothers also use the word '*confidence*' repeatedly within both their interviews and text. This appears to be inspired by both the PSW having survived PND and the fact that the Worker repeatedly reassures them that they are not '*a failure'*, 'a *terribly bad mother'* or '*incompetent*'. The confidence of the participants is increased greatly by the fact that the PSW is able to escort them to various toddler groups, swimming and clinic attendances – thus providing strong social support too. A number of the mothers simply could not 'face' the thought of attending groups or meetings alone. They subsequently felt alienated and even more isolated by this contributory factor. The simple addition of having someone to go

with made a significant difference to many of the mothers. The PSW's were described on numerous occasions as *'reassuring'* – this appears to be both in their physical presence and in the conversations that they have. The mothers describe their Worker as '*a confidante', 'a saviour'* and '*a role model'*. When questioned further as to why they use such descriptions their responses have been that the PSW was simply so '*there*'. One mother described her Worker '*as reassuring as a hot water bottle on a winter's evening.*' The combination of the over-arching themes, on reflection, seems to conclude the intervention group feedback and comments as to why they valued their PSW so greatly and why the intervention appeared to have a positive effect on their mental health and well-being.

The mothers within the control group talked about their feelings of despair, anxiety and guilt – expressions used by the intervention group prior to their support from the PSW taking effect. However, the small number of mothers from the control group, who sought their own support, from fellow mothers, used a number of similar expressions to those used by the intervention group. These have been placed within the table below in an attempt to emphasise and summarise the common themes – amongst both the PSW's and the participants.

Table 14: Combined themes of the PSW's and all participants.

MAIN THEME.	SOURCE.	EXAMPLE OF QUOTES.
Changing perspective	Peer Support Worker Mothers from both the control and the intervention group.	'No quick fix'. 'Time and patience required.' 'Pre-conceived ideas abandoned.' 'Hope to make a small difference'. 'Humbled by experience - surprisingly'.
Personal benefit	Peer Support Worker Mothers from both groups (control group who sought own support)	'Reflect upon their own Journey'. 'Positively helps them to see how far they have come'. 'What worked for them – share'. 'Sheer relief'. 'Hope.' 'Therapy'.
Abandoning	Peer Support Worker	'Worry that all the hard work will be undone.' 'Guilty'.

Hiding from their Health Visitor.	All Mothers.	‘Falseness’. ‘Putting on a brave face'. ‘Relief when visit is over’. ‘Artificial, tick box exercise’.
Getting help from fellow mothers.	All Mothers	‘Sheer desperation – seeking help’. ‘Relief to talk to another mother.’ ‘Share experiences/feelings'.
Inability to relate to Health Visitor	All Mothers	‘Has no personal experience’. ‘Does not understand’. ‘Simply a tick box exercise'. ‘Doesn’t get it'.
Therapy/Support/Hope/ Empathy.	PSW’s and Mothers	‘Their PSW actually understands’. ‘Has experienced the same despair’. ‘A pillar of hope’. ‘Really seems to get it’. ‘Not a failure’. ‘Hope for the future'. ‘Appreciating their own recovery’.
The PSW is the expert.	Mothers from the intervention group.	‘Personal experience’. ‘Vast knowledge’. ‘Complete empathy’. ‘Akin to their worker’. ‘A survivor’. ‘Expert’.
Social Support/ Emotional Support.	PSW’s and Mothers (control group who sought support).	‘Supportive role’. ‘A fellow mum’. ‘A companion’. ‘Increases confidence to attend social groups’. ‘Empathy'. ‘Feels at ease'. ‘Can be true self'.

8.2 Expertise – Differing Perceptions

A number of the participants within the intervention group described their PSW as an '*expert'* within the field of PND. This was most interesting as it may be perceived by many that the HV was the 'expert' due to their occupation and subsequent theoretical knowledge of PND. An expert, as described by Germain (2009) is a person who is widely recognised as a reliable source of 'technique or skill whose ability for judging either wisely or fairly is accorded both authority and status by either their peers or the general public in a specific domain'. An expert, perhaps in more general terms, may be seen as a person with extensive knowledge or ability in a particular subject/area.

A number of the participants in both the control and the intervention group felt that their HV should be '*the expert'* due to her '*professional status'* – or indeed she should be viewed as the 'expert' – when questioned further the mothers responded by saying that although they felt that they wanted to '*label the HV as this they didn't really value any of her expertise as it wasn't real, it was simply obtained through a text book*.' The mothers within the intervention group described their PSW as an '*expert'*, simply because they had '*so much valuable experience'* and this experience was '*related to reality'* – not obtained through an occupation or a journal. As was demonstrated by Mother 4 (intervention group) in her log book reflection,

> *'my perception of an expert has changed irrevocably as I now realise that to be an expert you do not require a professional title or have an academic qualification within a particular subject. Life experience is much, much more of an asset than any piece of paper or job title.'*

Beattie's Model of Health Promotion (Naidoo and Wills 2009) may be related to the concept of expertise. Beattie suggests that there are four paradigms for health

promotion and that these are generated from the dimensions of mode of intervention – which ranges from authoritative (top down and expert led) to negotiated (bottom up and valuing individual autonomy). The HV may be perceived as authoritative with objective knowledge, perhaps using health persuasion to encourage individuals to adopt a different lifestyle. The PSW may be considered as a negotiated mode of intervention utilising participatory or subjective knowledge as the mode of intervention. The PSW uses personal counselling and empowerment within their intervention. The PSW's focus of intervention may be described by Beattie as 'collective' – that is the individual emancipates groups and communities so that they recognise what they have in common and how social factors influences their lives. The practitioner is in the role of 'advocate'. The activities include community development and action – emancipating groups and communities so that they recognise what they have in common and how social factors influence their lives. The practitioner may be considered an advocate - this could be potentially the involvement of the PSW.

8.3 Social Support

Many of the mothers within the intervention group, and those mothers within the control group who sought support from fellow mums, discussed the immeasurable value of '*social support'*. Social support, as described by Kendall-Tackett (2010) is the perception and actuality that one is cared for, has assistance available from other people and may be part of a supportive social network. This relates back to the earlier research carried out by Stuart and O'Hara (1995), Morrell (2009) and Honey et al (2003) which advocates the great benefit of both, family, friends and community support. In cultures where there is a low incidence of PND there is a huge proportion of personal attention administered to the mother. As aptly described by Tammentie (2004) – 'mothering the mother.'

This is clearly, from the written and verbal reflections, how the mothers felt. The PSWs/fellow mums made them feel '*normal', 'not a failure,' 'bad mother'* or *'as if*

they were going completely nuts'. The mothers shared common ground with their Worker and the fact that the PSW had survived PND was a huge inspirational factor. The supportive resources can be considered in many guises – emotional, tangible, informational, companionship and intangible. The mothers felt that the support they received was both emotional and companionship. Social support has consistently been linked to many benefits for both physical and mental health and indeed, in the current study, the benefits have been greatly recognised.

The social support provided by the PSW's was not only in the form of communication but also in the widening of the mothers social network. They supported the mothers in their attendance at toddler groups, clinics and coffee mornings. This was an extremely positive factor as after the PSW had completed their six visits the mothers had attained a wider social support from being introduced to other mothers through the places they had been to with their PSW. Thus the support continued. This was the same with the mothers from the control group who found their own form of support – the difference being that they had to find the confidence to attend clinic/toddler groups on their own initially. This was, clearly, too much of a hurdle for a number of the mothers to face.

A number of the mothers wrote within their reflective log books that without this social support from their worker they would still be battling to even get out of bed or go to the local shop. They certainly would not have been able to face the prospect of a group setting with other mothers.

This study provides evidence that lay people who have experienced a similar health problem can have a positive effect on psychological well-being. There are several possible explanations as to why the PSW's reduced the depressive symptoms of mothers with PND. Members of a social network can exert a salutary influence on mental health by role modelling health relevant behaviours (Dennis 2003). Integration in a social network might also directly produce positive

psychological states, including a sense of purpose, belonging and recognition of self-worth (Cohen et al 2002).

These positive states, in turn, may benefit mental health because of an increased motivation for self-care. Being part of a broader social structure enhances the likelihood of accessing various forms of support, which in turn, as suggested by Lin et al (1999), protects against distress. The perceived availability of social support in the face of a stressful event might have led to a more benign appraisal of the situation, thus preventing a cascade of ensuing negative emotional and behavioural responses. As the causal pathway is still relatively undetermined theoretically all are viable options.

8.4 Negativity towards the Health Visitor 'Expertise'

A further topic for key discussion, which is also an area for great concern, are the feelings of negativity that the mothers from both the control and intervention group displayed, and voiced, about their interaction with their Health Visitor.

From analysis of the data from the log books and the transcribing of the audio-recordings the general feeling ascertained is that the mothers clearly did not value their HV's input or support. Although a small number felt that their HV 'meant well' and was 'generally a nice person', the mothers felt that they didn't really 'understand as they had no kids of their own' were 'out of touch with reality' and the conversation was often 'superficial drivel'. A number of the mothers talked about 'hiding from their HV' and 'pretending to cope' – relating back to the earlier work of Beck (1995) whereby he describes mothers 'hiding their depression'. In a study by McGarry et al (2009), 60% of mothers with depressive symptoms did not seek treatment. The primary fear was that their baby may be removed from their care. This feedback is obviously concerning for both mothers and the Health Visiting profession as a whole. It poses the question as to why Health Visitors are being

portrayed in this way (this is obviously not categorically a fact for all of the profession) and what can possibly be done to address such negativity.

During the one to one interviews with the lead researcher the mothers who did discuss their negativity towards the HV, were asked as to why they felt the way that they did. Responses were quite similar, they did not feel that the HV 'understood', 'was simply completing a paper exercise' or simply 'did not listen or gauge emotions'. The Health Visitors were described as being 'out of touch' and 'out of date'. A number of the mothers stated that after their HV left they 'felt tearful', 'unworthy' and an 'inadequate mother'.

These comments are obviously very alarming. This is an issue that clearly needs to be addressed, perhaps a training need but certainly an area that requires further exploration and research in the future.

With the delivery of the Health Visitor Implementation Plan – A Call for Action 2011-2015 (Department of Health (DOH) 2011) and the subsequent training of a further 4,200 Health Visitors by 2015 perhaps some of these issues may be resolved and addressed. The Governments initiative is to expand the Health Visiting workforce, encourage professional mobilisation and align delivery systems. It has been described by the DOH as a 're-energising, expansion and update' of the profession.

Taking in to account a number of the comments from the mothers perhaps this new workforce will improve relationships between practitioners and their client base. Student Health Visitors and existing Health Visitors need to return/revisit the artistry of their profession. Awareness needs to be raised amongst the profession about the negativity surrounding their role and attempts to change this negativity need to be recognised as a major priority.

This research shows that this could involve exploring communication styles, compassion, empathy, and care – returning to the fundamental basics of the caring profession. Higher educational institutions and clinical areas need to revisit their vision and embrace the 6 C's (DOH 2012). Both the science and the artistry of our profession should go 'hand in hand' and one should embrace the other. The mothers valued the care, empathy and compassion demonstrated by their Support Workers – these skills clearly need to be 'drawn out' of the professionals too. The whole ethos of the health visiting service and the training provided needs to be readdressed if this feedback is typical for the profession. Links need to be strongly forged between clinicians and educators and deficits focused and improved upon. Service user feedback needs to be given and acted upon if we are to improve both public perceptions and health visiting practices. If the number of Health Visitors does increase as per the government target, the results may assist in the delivery of a more proactive service in respect to the care of mothers suffering from PND. With an increase in workforce there may be an increase in time and thus the provision of more support groups/one to one visits for mothers. However, the implementation plan is still in its infancy and it may be a number of years before any benefit is truly measurable. In the interim it is crucial to ascertain as to why relationships between mothers and their HV are not viewed in a more positive stance and, as previously stated, this is certainly an area for further research.

From the analysis of the qualitative data and the identification of what the mothers really valued, an emphasis needs to be placed upon the qualities required to be an effective practitioner. This could certainly be identified in a robust recruitment package for student HV's or new Health Visiting posts – ensuring that they really do understand what qualities are required and an in-depth insight in to the role of the HV. Value based interviewing is becoming increasingly popular as a selection process (NSPCC 2012) and involves questions at interview that attempt to determine whether the applicant possess the qualities required to effectively fulfil the role. A personality profiling questionnaire is also administered. The NSPCC

describe this as ‘recruiting for values and training for skills’. For existing HV’s focus should be placed upon the importance of reflective practice and clinical supervision – the opportunity to discuss cases/situations with a trained supervisor and reflect upon how it may have been done differently if required. As practitioners we should always be responsible for examining our practice and improving /maintaining our quality and standards of care consistently. As the Government drive for the HV implementation plan comes into fruition, and the expansion of HV’s increases, then time allocation for such reflective practices should be of paramount importance.

A further area to improve the level of negativity displayed would be to educate the general public as to the role of the Health Visitor. It appears from conversations with mothers and from reviewing comments placed on internet sites that a Health Visitor is perceived as a ‘type of social worker’, ‘an interfering busybody’, ‘someone who examines the cleanliness of your house’, ‘who will remove your child if you are seen as an unfit mother’. Obviously the role of the HV is misjudged and misunderstood. This knowledge could be improved by educating the general public and advocating the positive aspects of Health Visitors. Possibilities may be an internet site for parents to access that purely portrays the role of the HV and provides true justification of their role. Health Visitors could be more proactive and visual in the promotion of their qualifications and the training they have received, in addition to all of the services and qualities that they can subsequently offer (Baldwin 2012). This could be an information sheet within the parent held records outlining the qualifications and describing the role of the HV and the services that they can offer to parents and families.

An innovative idea may be to hold ‘road shows’ whereby HV’s are available to offer advice and support but can also advocate their roles to the general public to raise awareness. Within health centres, surgeries, and schools there could be the availability of leaflets about the HV role and posters advertising their services and

specification of what a HV actually is. This information could be incorporated in to the general information sheet that all surgeries give to new patients. The HV could be presenting in both nurseries and schools to parents and families about their role and contact information. This could be carried out in a 'rolling programme' thus capturing the attention of new parents too. Antenatal classes could be held promoting the role and providing information to pregnant women and their partners.

8.5 Strengths and Weaknesses of the Study

The Mixed Methods approach and the use of both qualitative and quantitative data, on reflection, enhanced this study. This approach provided a more comprehensive account of the PSW intervention and its subsequent impact on the mothers. Mixed methods approach, as suggested by Denscombe (2008) is problem driven rather than theory driven. Its underlying philosophy is that of pragmatism. Pragmatism provides a set of assumptions about knowledge and enquiry that underpins the Mixed Methods approach and distinguishes the approach from a purely quantitative basis that is based upon a philosophy of positivism, and a purely qualitative basis that is based on a philosophy of interpretivism. Pragmatism is described as the 'so what?' principle – for any argument the question must be asked 'what practical difference would it make if either I or my colleague was correct or incorrect in their theory'?

The qualitative data collected is rich in its content and description, real-life experiences, feelings and emotions are shared and it is possible to almost feel, at times, the despair that the mothers are experiencing. The quantitative data, the EPDS scores, provide the formal, scientific, statistical data – the calculated evidence that the PSW's did really make a difference. The quantitative element of this study provides the analyses with an 'aura of scientific respectability and credibility' (Denscombe 2008). Each set of data analysis complements the other. A pragmatist approach guided the research study; an emphasis was placed upon a practical approach to the problem (reducing postnatal depression). The approach

operates on the premise that the value of any theory can only be measured by how well it addresses real life, practical needs and how well it works in practice. Locke (2001) suggests that the test of a good theory is whether or not it 'works on the ground'. On reflection and analysis of all of the data, this theory did just that – it was a practical solution (providing support to mothers) that worked coherently in a real life situation.

An overwhelming strength of the study was the designing of the support intervention by the PSW's themselves. The Peer Support Workers collaboratively decided that they did not want to adhere to any formal model of counselling - they wanted to design and implement their own support package and, on reflection, this was a very positive factor.

Despite the many strengths of the study the results may be limited in that the clinical diagnostic data for PND may be questionable. Although the EPDS is administered alongside a clinical assessment the results may produce a false positive as the mothers' mood may be particularly low on the day the assessment is performed (Paykel et al 1999). In addition the EPDS was only repeated at six months, if it had been repeated again at 12 months or 24 months the results may have portrayed a different outcome. A longitudinal study would be a further recommendation.

A further confounding factor that requires consideration is the variations in the type of activity undertaken within the intervention group – for example swimming or attendance at a toddler group. However, although a consideration, the majority of meetings were held within the mothers own home and only on an occasional basis was a meeting held or outing arranged at an alternative venue.

Other limitations include the pragmatic exclusion of women who did not have English as their first language. This was agreed by the Ethics Committee as

funding for the study was strictly allocated to the PSW's travel expenses. A translator would have been a further expenditure. A further limitation was the number of participants selected; this is a relatively small study due to funding, time and resources – it is a 'stand-alone' pilot study. A greater number of recruits to both the control and intervention group may have produced different results.

8.6 Credibility of the Analysis of the Qualitative Data

The analysis of qualitative data is, as suggested by Denscombe (2008) time-consuming and requires rigid organisation and creativity. It certainly does not follow a structured protocol and cannot be encapsulated within statistical data, graphs, and tables. The verification of qualitative research is crucial. Silverman (2000, 2006) wrote that credibility is essential for all research and in the absence of verification the research would lack credibility. The credibility of research is an issue that needs to be demonstrated as part of the process itself. As suggested by Silverman, for the research to achieve credibility there needs to be a demonstration that the findings are based on practices that are acknowledged to be the bases of sound research. Denscombe (2008) writes that, conventionally, the bases for judging the quality of research are as follows:

- Validity – The accuracy and precision of the data – asking the question, 'Are the data the right kind for investigating this particular subject and have they been correctly measured?'
- Reliability – Would the research instrument produce the same results on different occasions (all other things being equal)?
- Generalisability (external validity) - This refers to the prospect of applying the findings from research to other examples of the phenomenon. It concerns the ability of research findings to explain, or occur in, similar phenomena rather than being something that is only unique to the particular cases used for the study.

- Objectivity – This refers to the absence of any bias within the study. It denotes research that is impartial and neutral in terms of the researcher's influence on its outcome, and it denotes processes of data collection and analysis that are both 'fair and even-handed.'

On reflection, the credibility of this study is not easily judged using Denscombe's criteria. It is not feasible to ascertain the quality of the study and its findings by replicating the research in a way that a scientist may repeat an experiment. One of the primary reasons is that it would be virtually impossible to replicate a social setting (either the meetings with the PSWs, the group/individual discussions, or the support visits to the mothers). As suggested by Denscombe, time invariably does change situations and the prospect of assembling equivalent people, in similar settings, sharing exactly the same feelings and emotions, in an environment that has not changed, is highly unlikely.

A further implication is that, as the lead researcher, you are rather intimately involved and embroiled in the collection and analysis of the qualitative data. The prospect that another researcher may be able to produce identical data and arrive at the same conclusion is unlikely. The nature of qualitative research means that it will never be possible to be verified in the same way as quantitative research - but there is still a need to address the need for verification (Silverman 2006). Lincoln and Guba (1985) suggest that there are steps that can be taken to help with the task of persuading readers of the study that the data are 'reasonably likely' to be accurate and feasible. This may offer the reassurance that the qualitative data produced has been checked in accordance with good research practice.

With reference to this study, the lead researcher used 'respondent validation' that is returning to the participants, both mothers and PSW's, with the data and findings as a means of checking validity. This method, on reflection, worked very positively. It allowed a check on factual accuracy and enabled the lead researcher's

understanding to be confirmed, or amended, by the research participants. The content of their log books were analysed by the researcher and interpretations discussed. Any queries regarding meaning or grammar were verified and confirmed. Notes of conversations occurring within meetings or supervisory sessions were also shared and accuracy confirmed with all of the relevant parties.

The lead researcher became an integral part of the data collection technique. Denscombe (2008) suggests that because of this, the question of reliability translates from, 'Would the research instrument produce the same results if used by a different researcher (all other things being equal)?' to 'If someone else carried out the study would they have reached the same conclusion and results?' As, in this particular study, EPDS questionnaires, log books and one to one interviews were used then the answer may be positive, although in the absolute sense there is no way of knowing this for certain. The research does reflect procedures and decisions that other researchers can see – thus acting as a proxy for being able to replicate the study – but this cannot be guaranteed.

As suggested by Schon (1983) the research process must be open for audit. Within the study an audit trail was constructed and mapped out for the reader – this allowed them to follow the path and recognise the key decisions made by the lead researcher. A detailed record of the process of the research decisions was maintained. The principle behind the audit trail, as discussed by Lincoln and Guba (1985), is that research procedures and decision making could be checked by fellow researchers who would then be in a position to confirm the existence of the data and subsequently evaluate the decisions reached in relation to the data collection and analysis.

8.7 Generalisability

This research was based on a rather intensive study of a relatively small number of individuals. This may raise the question about how representative those

individuals are and how likely it is that what was found in those particular participants would be found in others in similar cases. Generalisability is based on the statistical probability of an aspect of the data recurring elsewhere, and, as stated by Flick (2009) it is a probability that relies on a large sample that is then representative of the wider population. A research study based on a small number of participants and qualitative data therefore needs to find an alternative way of addressing the issue. Lincoln and Guba (1985) referred to this as 'transferability.' Woods (2006) explains that this is an imaginative process in which the reader of the study uses the information about the particular instance that has been studied to reach a judgment about how far it would apply to other comparable instances. In question format this may be 'to what extent could the findings from this particular study be transferred to other instances?''

With reference to this particular study some of the findings could be transferred to other instances. For example, if the reader is armed with the appropriate information – in this instance all of the participants were first time mothers of a similar age, with no history of previous mental health problems and they all scored above 11 on the EPDS scale alongside a clinical interview – then they can make an assessment on how far the findings are transferable. However, the rich, detailed data obtained from the mothers' personal accounts and experiences would be very difficult to transfer as each individual has a different story, a different journey, and has many different feelings and emotions about their own experience of PND.

8.8 Objectivity

It is also important to consider objectivity in relation to any qualitative study (Woods 2006). The issue of objectivity concerns the extent to which the findings are free from the influence of the researcher carrying out the enquiry. Denscombe (2008) states that, at a fundamental level, no research can really ever be completely free from the influence of those who conduct it. He goes on to say that qualitative data, whether it is text or images, are always the product of a process of some individual

interpretation. The data is not 'waiting to be discovered' but is produced by the way that it is interpreted and therefore used by the researcher. This does have consequences for the prospects of objectivity as it raises the question of the researchers 'self' in the interpretation, and it also raises questions about the prospect of keeping an open mind and being able to consider different explanations of the data collected. The researcher's experiences and own values cannot be entirely eliminated from the analysing of qualitative data.

Within this study the lead researcher acknowledges that their 'self' is entwined with the activity but, on reflection, does believe that sufficient control can be exercised to enable them to operate in a detached manner. The investigation is not clouded by personal prejudices; the lead researcher is aware of the 'self' effect and has suspended both personal values and beliefs as much as possible. The lead researcher does, however, acknowledge that their self gives them a very privileged insight into the situation.

It is not feasible to present all of the data – in this instance, from log books, notes from supervisory sessions, EPDS scores (although this is quantitative data) and one to one interviews which then require lengthy transcribing. The lead researcher has been selective in the data presented and has prioritised certain elements over others – in an attempt to 'capture' the very strong emotions and experiences that the mothers were sharing.

8.9 Comparison with other Research Papers

The results from this study are consistent with those in a large Cochrane review which suggests that interventions to prevent postnatal depression are more likely to be successful if they are individually based, initiated within the early post-natal period and target high risk women (Dennis 2005). This study is original and makes an important contribution towards research on PND – as mentioned previously within the literature review, there has been a study initiating telephone peer support for mothers with PND (Dennis et al 2009) but the lead researcher, despite an

intensive literature search, could not source any previous studies providing face to face peer support.

8.10 How Does this Study Contribute to Original Knowledge?

This pilot study has shown that peer support intervention did have a positive effect on maternal well-being. This finding has, in some ways, been reflected in many other previous research papers in the respect of the positive impact that any form of social support has on new mothers. However this was a ‘stand-alone’ exploratory study with a relatively small number of participants and further larger, longitudinal studies are required ideally to ascertain whether the positive impact impeded by the PSW had a lasting effect upon the mother’s mental health.

RECOMMENDATIONS

Recommendations from this pilot study would be further exploration around peer support intervention for mothers with an elevated EPDS score and positive clinical assessment as determined by a trained practitioner. A suggestion for future practice is that a PSW works in collaboration with the HV. The HV could conduct the initial assessment and if required offer the option of a PSW to a mother. Both practitioners could compliment one another's role by providing a package of care attuned to the mothers' needs - to achieve the best possible outcome for that particular mother. Group peer support could also be an option. Antenatal peer support requires further intensive investigation too. However, a major strength of the study was the involvement of the PSW's in the designing and implementation of the intervention. Formal training was not adhered to and the Workers planned their own strategy - which evolved as they got to know their mother and became familiar with her needs, anxieties, and perceived goals. This must be an important consideration within the utilisation of PSW's. Patient-public and service user involvement should be advocated and utilised to its full potential and its benefits widely recognised

The recent NICE guidelines (2015) emphasises the need for early recognition of mental health problems during both the antenatal and postnatal period. Improved recognition will come from intensive staff training and revision of routine care pathways. Prompt access to further assessment and/or intervention is now acknowledged as a priority (Howard et al 2015). In addition, easily available public health information is needed to promote recognition, rectify women's misplaced but understandable concerns about disclosing how they really feel (Dolman et al 2013). Psychological interventions – for example peer support - require further exploration prior to the administration of psychotropic drugs (Petersen et al 2011.) The NICE guidelines recommend a raised threshold for using medication to treat depression within the antenatal and postnatal period – and, hopefully, this will

encourage practitioners to explore other options prior to automatically prescribing medication. This will require greater and faster availability of psychological interventions that meet the needs of both pregnant women and those with newborn babies.

Barriers to providing effective care include a lack of knowledge and skills. A further recommendation would be to explore appropriate training opportunities for Health Visitors, and Midwives, within the postnatal depression arena. Training focused upon early detection and subsequent effective support is clearly required following the feedback from the study's participants. As demonstrated in previous research studies, early detection is a key factor in the successful treatment of PND (Santos et al 2007, Cooper et al 2003).

Training programmes should be reviewed continually, and annual attendance mandatory for all practitioners who work alongside mothers in either the antenatal or postnatal period. Earlier work by Small et al (1997) demonstrated a distinct lack of knowledge from health professionals about the type of individual susceptible to PND. Professionals (incorrectly) assumed that this was a 'white, middleclass illness' predominantly affecting 'individuals with unrealistic expectations'. Clearly, such presumptions need to be addressed – again clarifying the need for further training and education amongst those involved in both antenatal and postnatal care.

Simkin (1992) suggested from his research that the birthing experience had an incredibly long lasting impression upon a woman and negative experiences may lead to PND. Kendall-Tackett (2010) agreed with this theory and also pointed out that previous miscarriages, still births and cot deaths may also be a contributory factor – highlighting the need for intervention in the antenatal period and the identification of mothers with complex obstetric histories.

As previously mentioned Health Visitors need to be more proactive and visual within the promotion of their role and the wealth of guidance and support that they can offer to parents. As discussed earlier, with the expansion of the number of Health Visitors by 2015 time allocation may increase to accommodate this. The general public needs to be more aware of the services offered by the Health Visitor, their wide range of capabilities and, indeed, what a Health Visitor actually is. This may reduce the 'myths' that consistently surround the role and, in turn, parents confidence/awareness may increase and their relationships with their HV may become positive.

A replication of the study offering Peer Support for specific vulnerable groups - for example asylum seekers, ethnic minorities or teenage mothers, would further enhance the credibility and generalizability of the research paper. There is certainly a role for PSW's to work alongside the Health Visitor/Midwife and, indeed, they could enhance and continue the support programmes that are offered to the mothers. However funding would need to be explored and employment contracts/suitability of candidates scrutinized.

This pilot study has produced both quantitative and qualitative data that suggests that the involvement of a PSW with a mother who has evidence of suffering from PND has a positive effect upon the participant's maternal mental health. Post - natal depression is a global problem and statistics show an increase in the percentage of women suffering from the illness (Morrell et al 2009). There can be very serious long term, if not lifelong, consequences for mother, infant and family and a risk of suicide and infanticide in some severely depressed mothers. This study has clearly demonstrated that intervention from a PSW can reduce the severity and longevity of PND. It is a resource that seriously requires a more in-depth focus and further exploration on a much larger scale.

The decision to conduct semi-structured interviews seemed an appropriate choice because this method is particularly good at allowing the researcher to explore, in-depth, the thoughts, emotions and experiences of this group of mothers. However, because the interviews take time to co-ordinate, conduct and analyse, the number involved was relatively small and this may make the study and researcher vulnerable to criticism that the data is not representative. To compensate for this possible weakness, a mixed method strategy was adopted that also included a questionnaire (the EPDS), thus adding the value of a quantitative element to the study. The questionnaire did not, of course, provide the kind of depth of information that the semi-structured interview did but, by combining the methods, the researcher was in a position to avoid possible criticism linked to either the relatively small sample associated with the interview method or the relative superficiality of the data collected from the questionnaires.

The contrasting methods used can also be a means for moving the analysis forward, with one method being used to inform the other. The interviews were a way of building on to what had already been learnt by the initial method of a questionnaire (that the mothers' were feeling low in mood). They enhanced the information already known and provided a much more in depth and fuller picture, a valuable and somewhat rare opportunity to really understand how each participant felt and, in some instances, how they had reached such a low point. This, of course, would not have been achieved by a questionnaire alone.

The outcome of this study demonstrated the positive influence that a Peer Support Worker had on a mother with PND. As consistently highlighted with this research study, PND is a debilitating, sometimes life threatening illness and its incidence is rising at an alarming rate. Earlier research indicates that social support is a major contributory factor towards either the prevention of PND or a reduction in the severity and longevity of the illness (Stuart and O'Hara 1995, Honey et al 2003, Morrell et al 2009). This study assists in the confirmation of this. Any treatment

programme/intervention that may potentially make a difference to the lives of sufferers, and their families, needs to be fully explored and, subsequently, rolled out in practice.

Following the completion of the study there are now five Peer Support Workers currently employed within the Derbyshire area providing support to mothers with postnatal depression. As replicated within the study, the PSW's visit the mothers' weekly and provide support, advice and guidance. They have also established, and now successfully run, a number of PND support groups within the area. This provides the mothers' with the opportunity to meet up with fellow sufferers, to share experiences, and to simply acknowledge that they are not alone in their feelings and emotions. The Workers organise outings to a variety of places – toddler groups, swimming pools, libraries and, in addition, the mothers, and fathers, have been to social events together too. As within the study, there is no formal model of counselling adhered to, the PSW's design and implement their own support strategy and this evolves as they become more familiar with their mothers needs, anxieties and personal goals. Feedback has been extremely positive.

Funding has also been secured from the National Society of Prevention of Cruelty to Children (NSPCC) to pilot a further study within the Nottinghamshire area for the employment of 5 PSW's commencing in Spring 2015.

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RELEVANT ACTIVITIES UNDERTAKEN BY THE RESEARCH STUDENT

Three Perinatal Mental Health Awareness conferences arranged, delivered and co-ordinated.

Five Peer Support Workers now employed and supporting full time Health Visitor caseloads.

Further funding being sourced for the training and employment of other PSW's within the Derbyshire area.

Publication agreed for the British Medical Journal and the Community Practitioners Health Visiting Journal.

Student has presented the research study and its findings at De Montfort University, Leicester, Nottingham University, Staffordshire University, Stoke University, Strathclyde University, Glasgow, Warwick University, The Beeches Mother and Baby Unit, Derby and The Derby Royal Hospital, Derby.

Further research is being sourced for a larger, longitudinal study to be carried out within the Staffordshire area – a proposal has been submitted and the student is attending a panel hearing in November 2014.

The student teaches a number of sessions within her role as a Senior Lecturer on Maternal Mental Health – and her research study, within the degree programme currently running for Public Health Nurses, Children's Nurses, Midwives and Mental Health Nurses.

July 2014 – Funding secured from the NSPCC for a further pilot study to be carried out in the Derbyshire area – commencing in April 2015.